

TECHNICAL MANUAL
OPERATION AND MAINTENANCE

VOLUME II

SATURN IB & V ELECTRICAL SUPPORT EQUIPMENT
TYPE 1 COUNT CLOCK

PART NO:

LCC 1371-COUNT RACK-40M08202
1372-DATA TRANSFER RACK-40M08203
1253-POWER SUPPLY RACK-40M08204
1254-REAL TIME RACK-40M08205
LUT 1255-DATA RECEIVER RACK-40M08206
1256-POWER SUPPLY RACK-40M08261

CHANGE
NOTICE

LATEST CHANGED

PAGES EFFECTIVE

ON VEHICLE

501 & SUBSEQUENT

MSFC-MAN-205
LINE ITEM NO. 12H
DRD NO. LS-025A

RECEIVED
JAN 03 1967
J. P. DOLFS

RECEIVED
JAN 6 1967
C. E. R 1

PREPARED UNDER AUTHORITY OF CHANGE ORDER 177
TO CONTRACT NASw-410

BY

GENERAL  ELECTRIC
APOLLO SUPPORT DEPARTMENT
HUNTSVILLE, ALABAMA

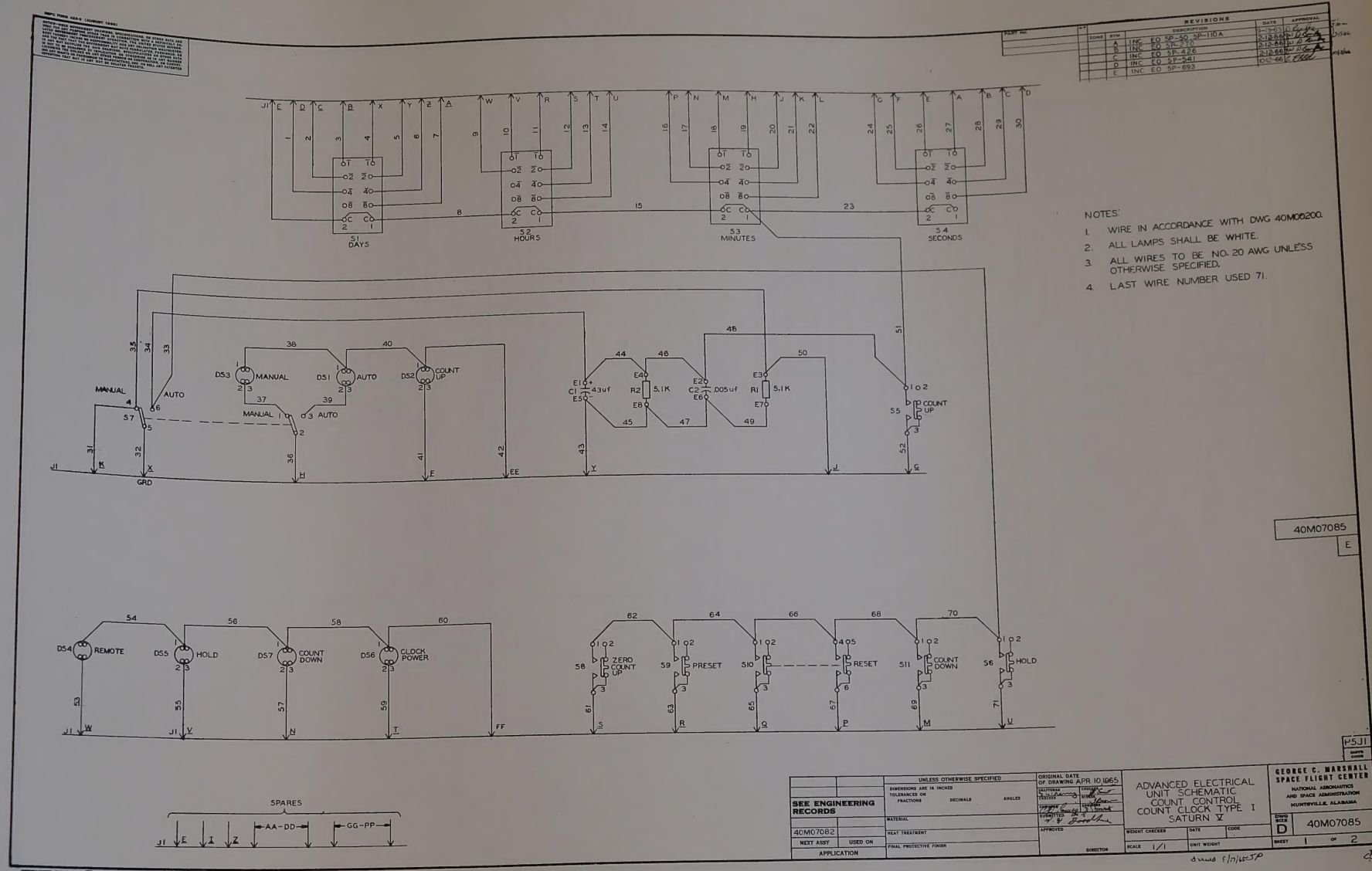
CHANGE DATA
30 NOVEMBER 1966

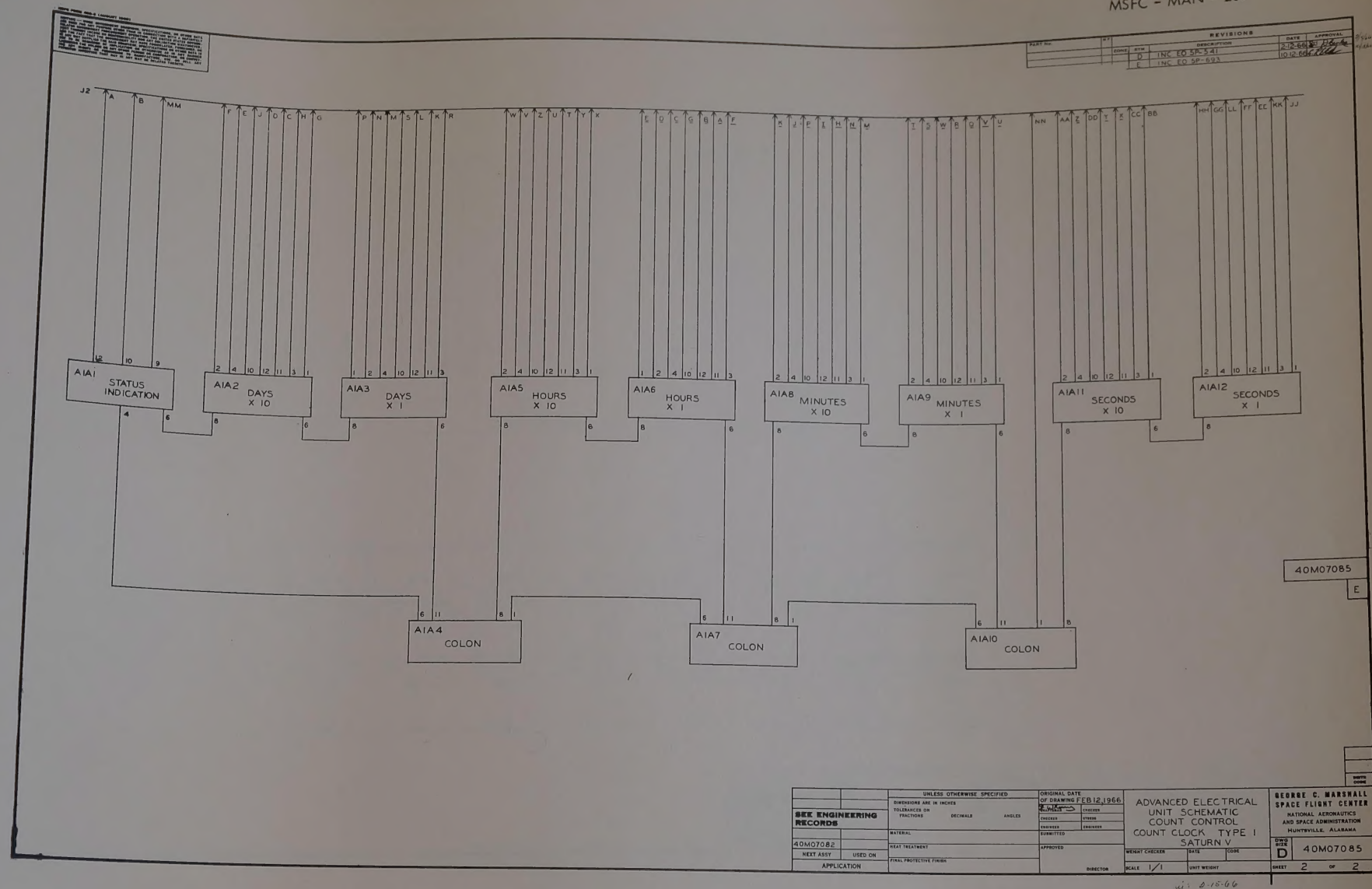
LIST OF EFFECTIVE PAGES

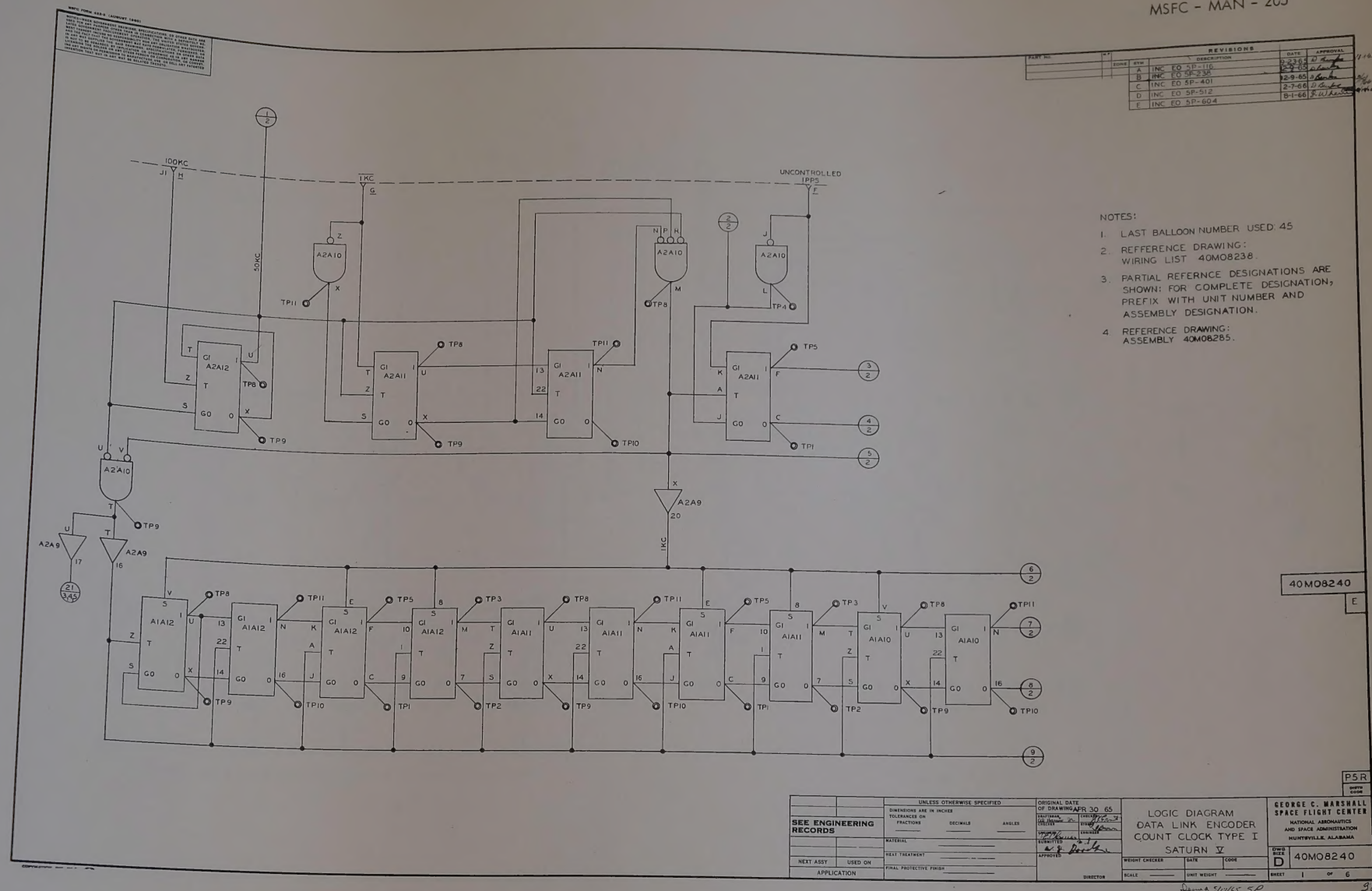
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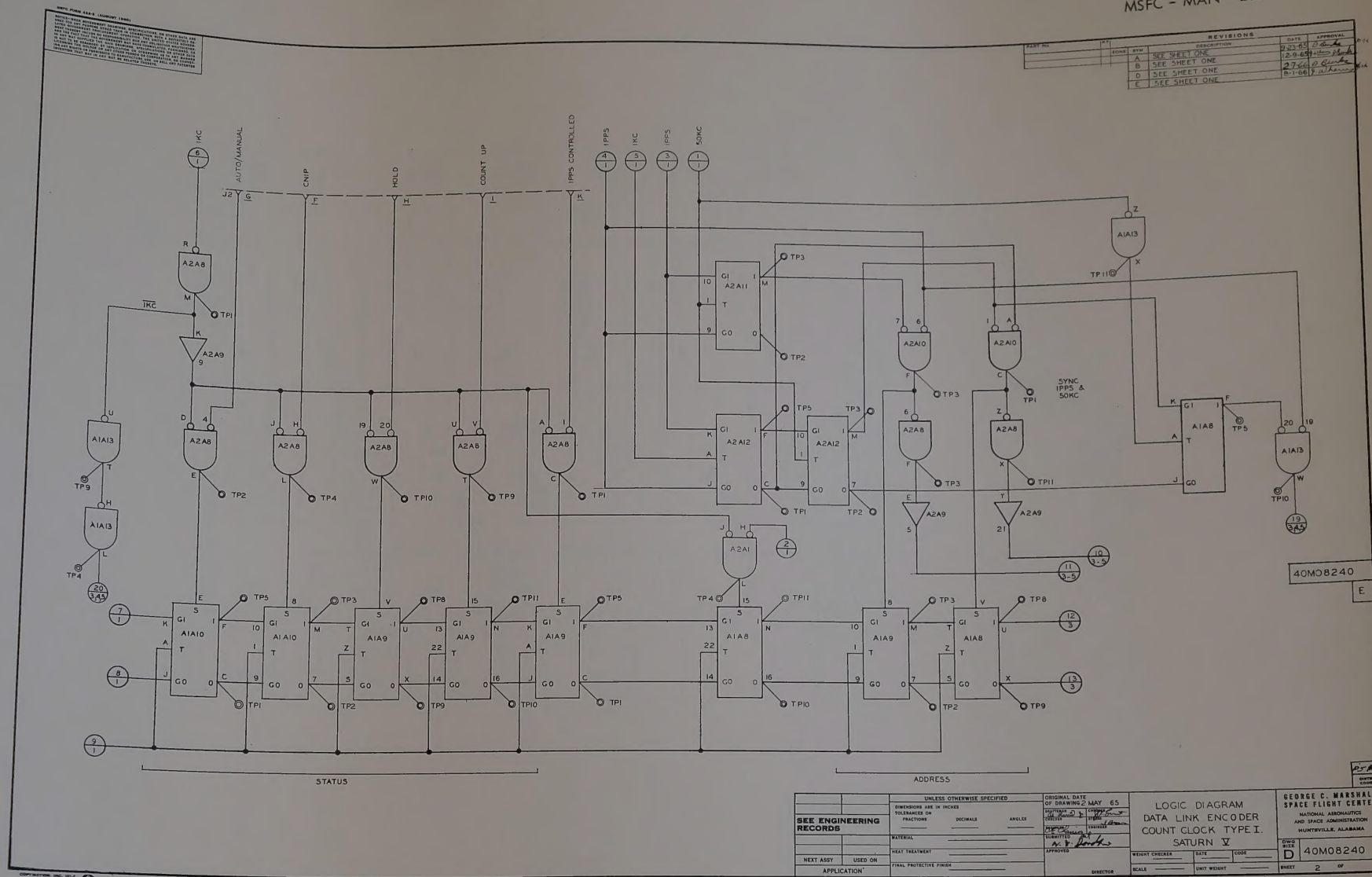
<u>Page No.</u>	<u>Issue</u>	<u>Page No.</u>	<u>Issue</u>
*Title	30 Nov. 1966	*6-93 thru 6-99	30 Nov. 1966
*A	30 Nov. 1966	6-100 thru 6-107	Original
i thru ii	Original	*6-108	30 Nov. 1966
6-1 thru 6-21	Original	6-109 thru 6-112	Original
*6-22 thru 6-23	30 Nov. 1966	*6-113	30 Nov. 1966
6-24 thru 6-36	Original	6-114 thru 6-118	Original
*6-37 thru 6-38	30 Nov. 1966	*6-119	30 Nov. 1966
6-39 thru 6-40	Original	6-120 thru 6-121	Original
*6-41 thru 6-57	30 Nov. 1966	*6-122	30 Nov. 1966
6-58 thru 6-70	Original	6-123	Original
*6-71 thru 6-72	30 Nov. 1966	*6-124	30 Nov. 1966
6-73 thru 6-78	Original	6-125 thru 6-144	Original
*6-79	30 Nov. 1966	*6-145 thru 6-148	30 Nov. 1966
6-80 thru 6-83	Original	6-149 thru 6-189	Original
*6-84 thru 6-86	30 Nov. 1966		
6-87	Original		
*6-88 thru 6-89	30 Nov. 1966		
6-90 thru 6-92	Original		

*The asterisk indicates pages revised, added, or deleted by the current revision.
Insert latest revised pages. Destroy superseded pages.





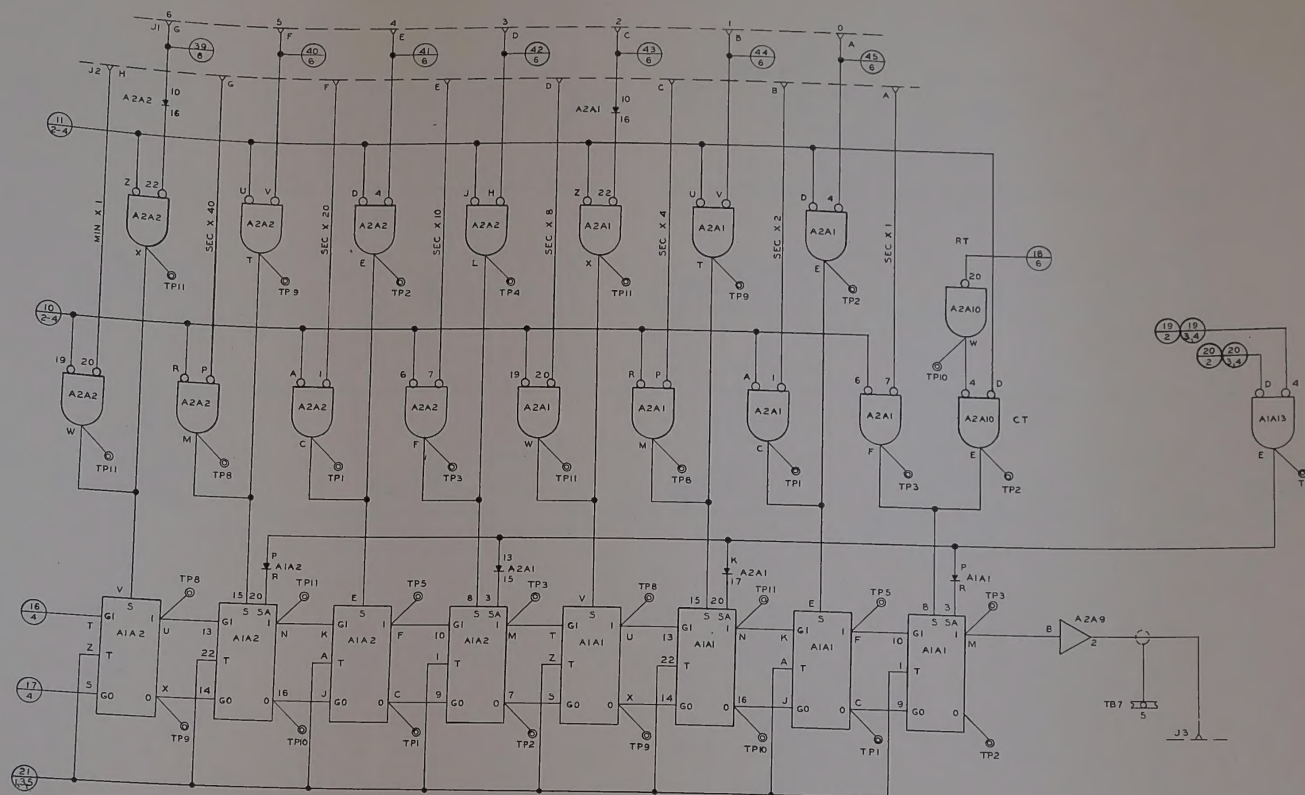




UNLESS OTHERWISE SPECIFIED (UNLESS SPECIFIED)

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REVISIONS				DATE	APPROVAL
1	SEE SHEET ONE			12-1-65	
2	SEE SHEET ONE			12-1-65	
3	SEE SHEET ONE			12-1-65	
4	SEE SHEET ONE			12-1-65	



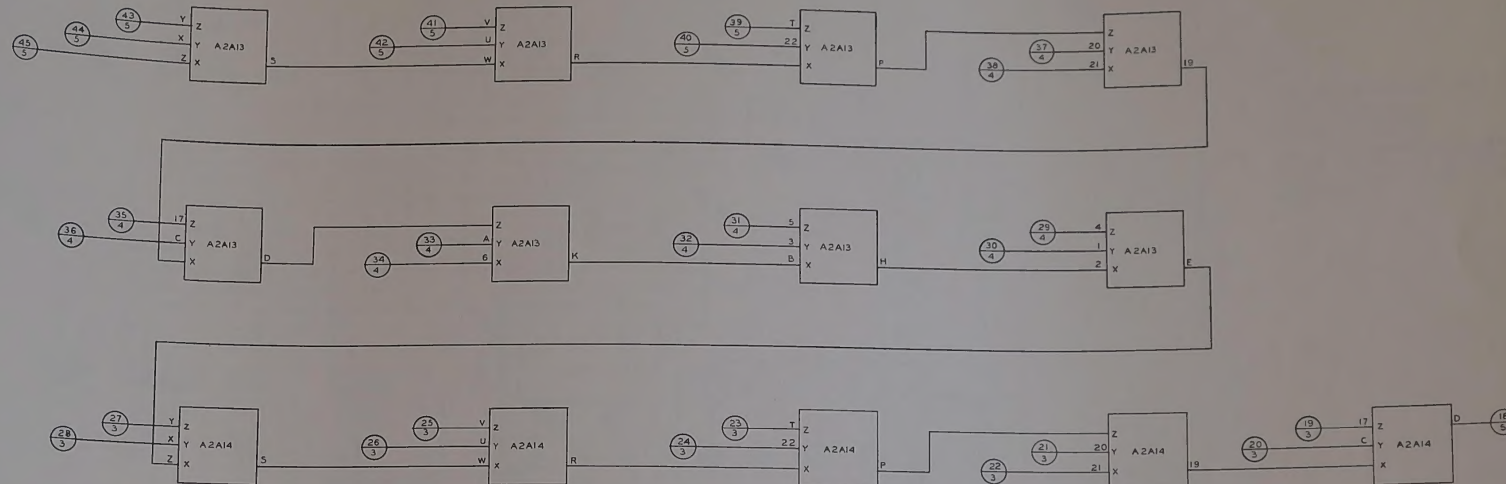
40M08240

E

PSR

D

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SEE ENGINEERING RECORDS	TOLERANCES ARE IN INCHES FRACTIONS DECIMALS ANGLES	APPROVED BY [Signature]	APPROVED BY [Signature]		
NEXT ASSY USED ON	HEAT TREATMENT	APPROVED BY [Signature]	APPROVED BY [Signature]		
APPLICATION	FINAL PROTECTIVE FINISH	APPROVED BY [Signature]	APPROVED BY [Signature]		

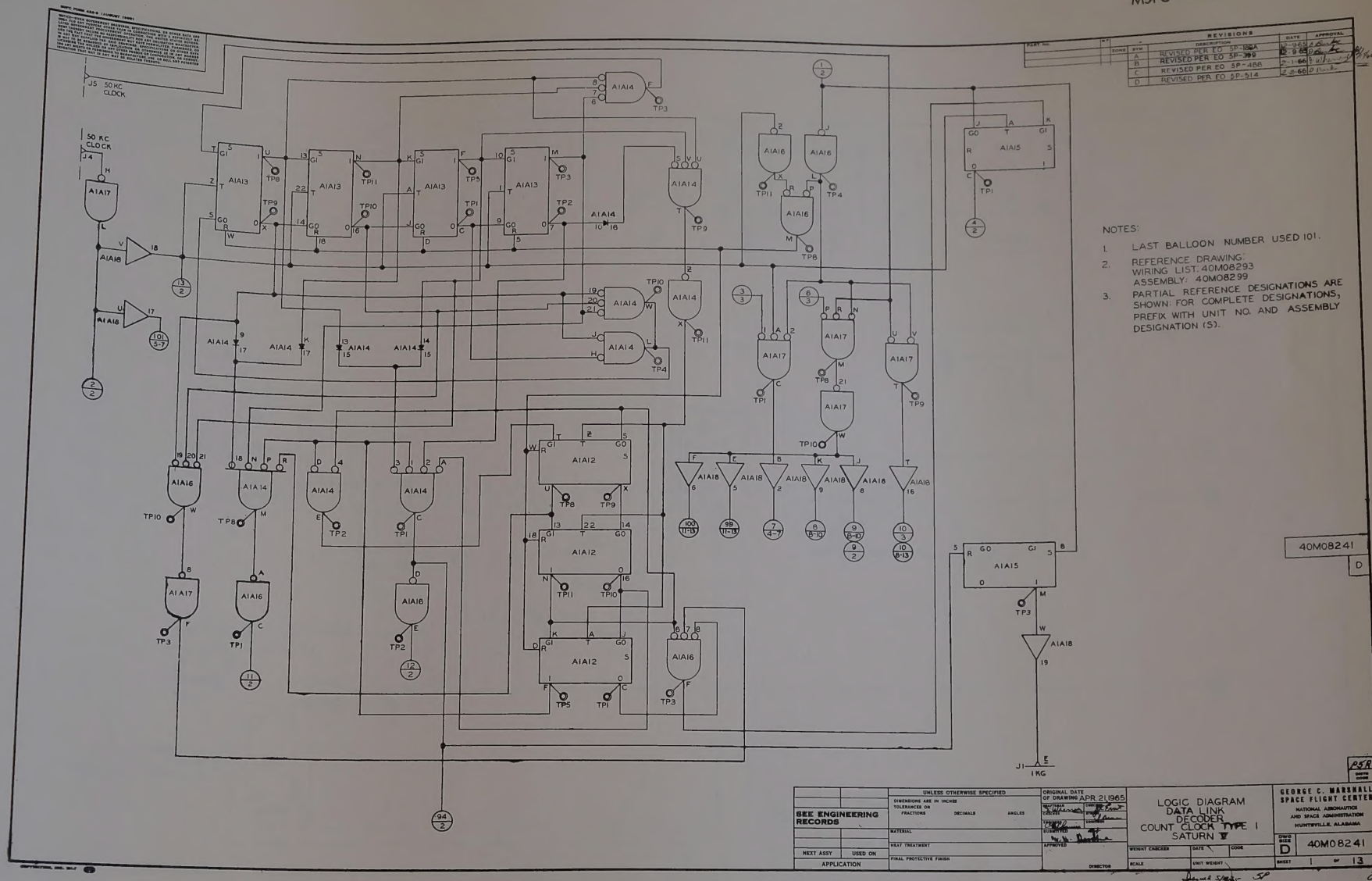


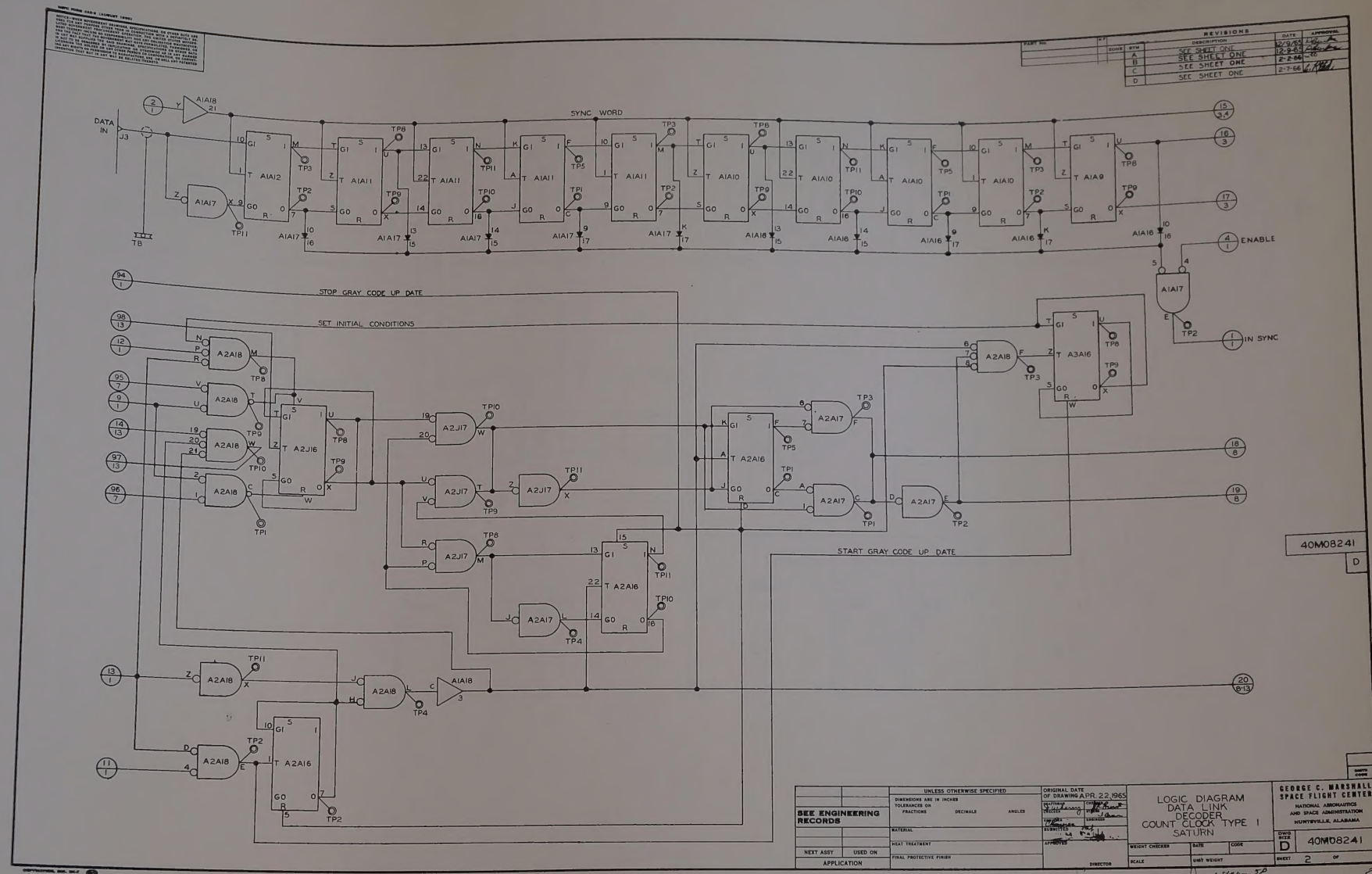
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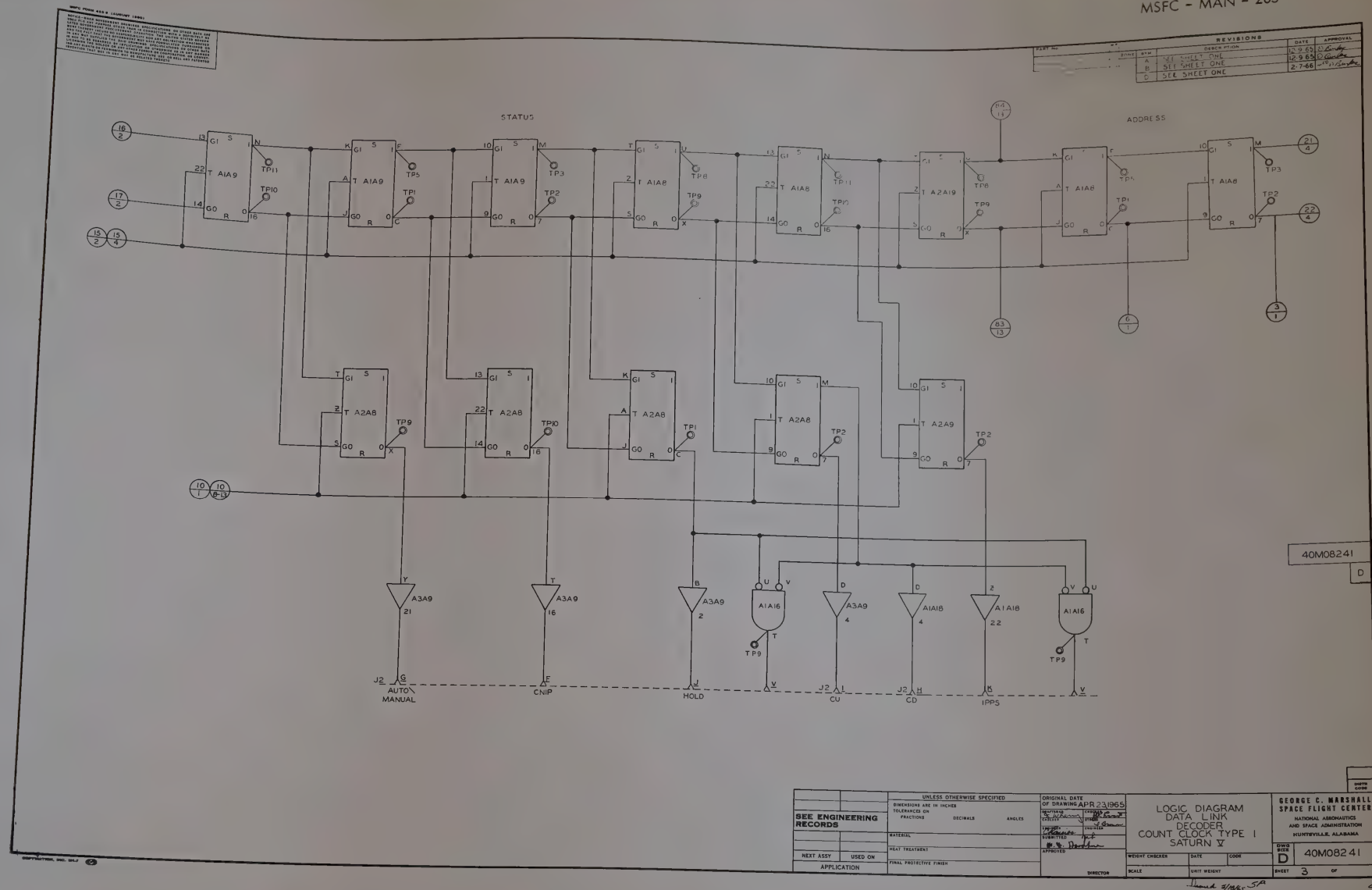
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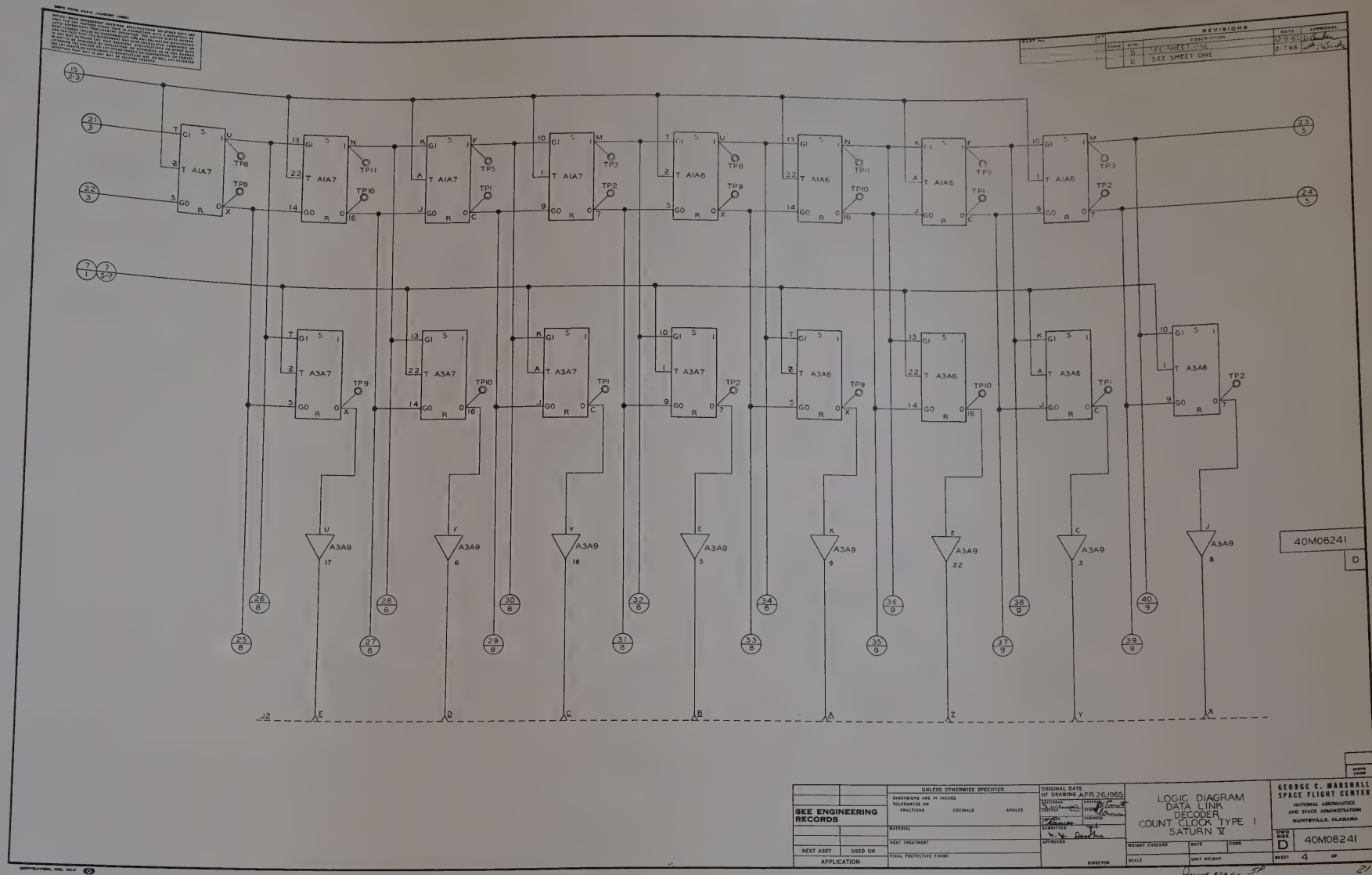
PSR

SEE ENGINEERING RECORDS	UNLESS OTHERWISE SPECIFIED		ORIGINAL DATE OF DRAWING DEC 8 1965	LOGIC DIAGRAM DATA LINK ENCODER COUNT CLOCK TYPE I SATURN V	GEORGE C. MARSHALL SPACE FLIGHT CENTER NATIONAL AERONAUTICS AND SPACE ADMINISTRATION HUNTSMVILLE, ALABAMA
	DIMENSIONS ARE IN INCHES		<i>Handwritten:</i> 10/10/65 CHECKED		
	TOLERANCES ON FRACTIONS	DECIMALS	ANGLES		
	CHECKED	DRAWN	ENGINDED		
	MATERIAL	QUANTITIES	APPROVED		
	NEXT TREATMENT	FINAL PROTECTIVE FINISH	WEIGHT CHECKED		
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APPLICATION			SHEET	OF	PROJECT 6 OF





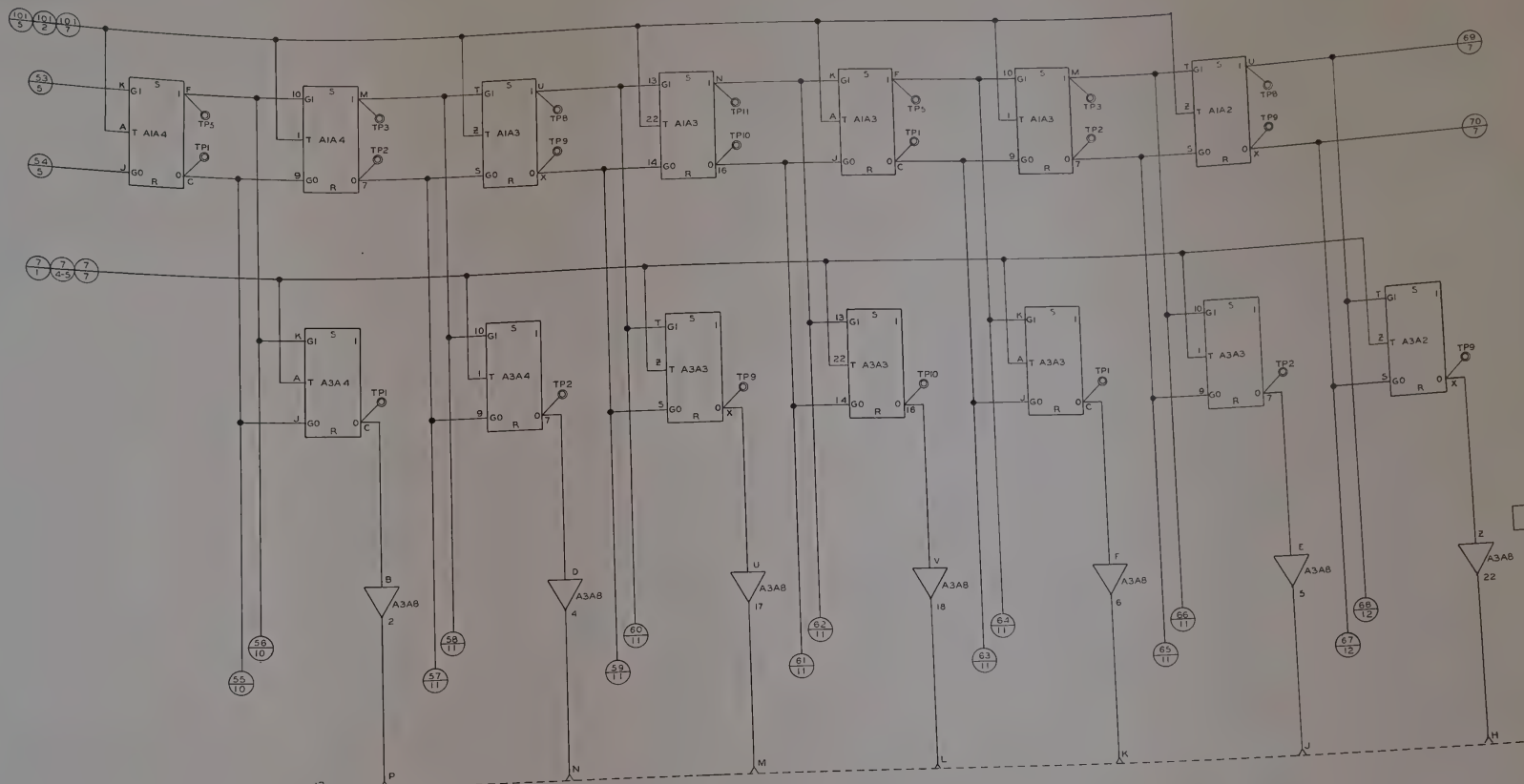






NOTE: THIS DRAWING IS A REVISION OF THE PREVIOUS EDITION. IT IS THE RESPONSIBILITY OF THE USER TO BE AWARE OF THE REVISIONS AND TO USE THE CORRECT EDITION. THE USER SHALL BE RESPONSIBLE FOR THE CORRECT INTERPRETATION OF THE DRAWING. THE USER SHALL BE RESPONSIBLE FOR THE CORRECT INTERPRETATION OF THE DRAWING. THE USER SHALL BE RESPONSIBLE FOR THE CORRECT INTERPRETATION OF THE DRAWING.

REVISIONS			
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2	12-2-65	SEE SHEET ONE	SEE SHEET ONE

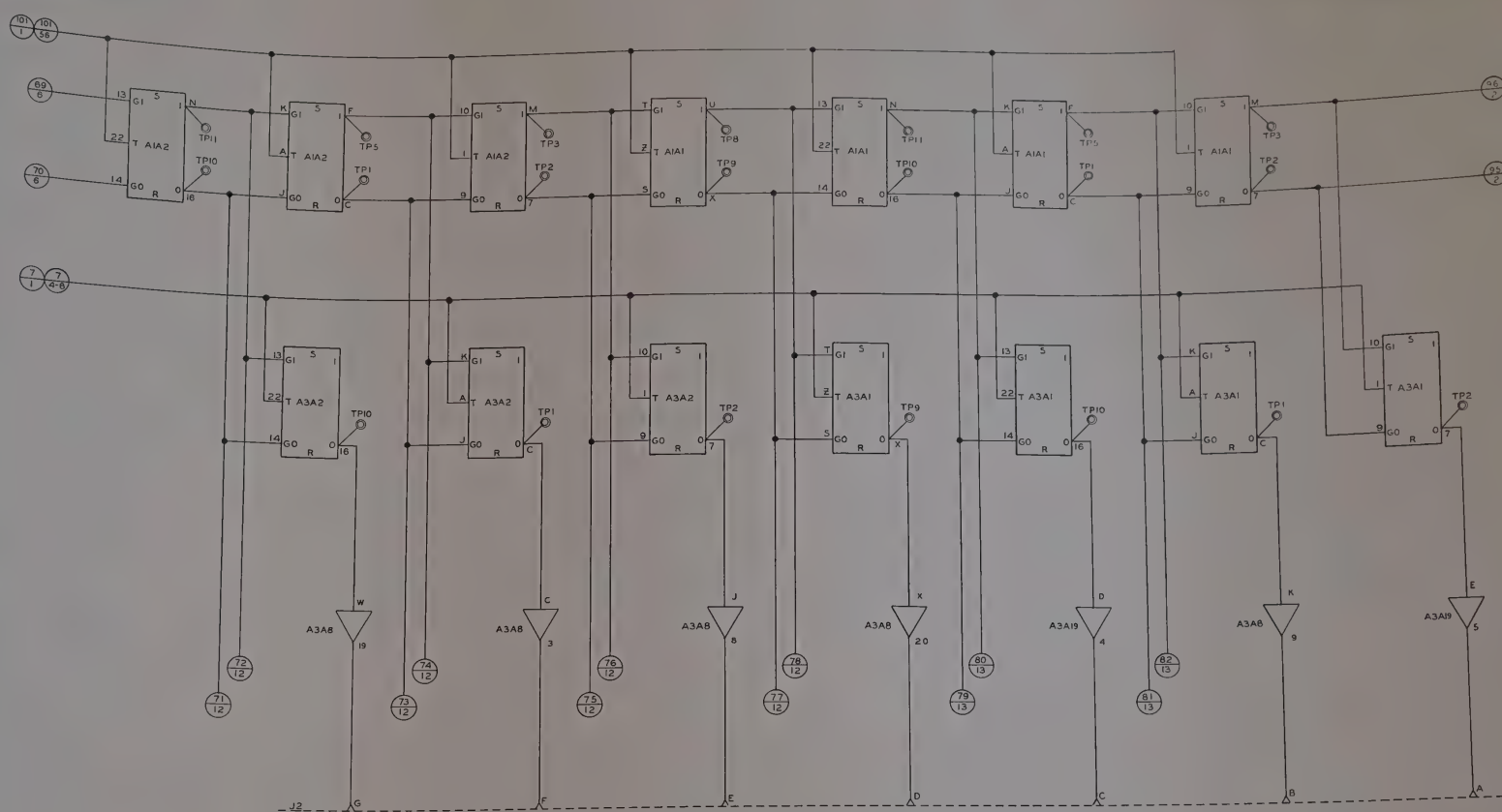


40M08241

SEE ENGINEERING RECORDS		UNLESS OTHERWISE SPECIFIED		ORIGINAL DATE OF DRAWING APR 27 1965		LOGIC DIAGRAM DATA LINK DECODER COUNT CLOCK TYPE I SATURN V		GEORGE C. MARSHALL SPACE FLIGHT CENTER NATIONAL AERONAUTICS AND SPACE ADMINISTRATION HUNTSVILLE, ALABAMA	
TOLERANCES ARE IN INCHES		FRACTIONS DECIMALS ANGLES		APPROVED		DATE		CODE	
MATERIAL		TEXT TREATMENT		APPROVED		SCALE		UNIT WEIGHT	
NEXT ASSY USED ON		TOTAL PROTECTIVE FINISH		DIRECTOR		SHEET		6	
APPLICATION								40M08241	

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REVISIONS			
REV	DATE	APPROVAL	DESCRIPTION
1	12-1-65	W. J. H. H.	SEE SHEET ONE
2	12-8-65	W. J. H. H.	SEE SHEET ONE
3	12-8-65	W. J. H. H.	SEE SHEET ONE



40M08241
D

UNLESS OTHERWISE SPECIFIED			
DIMENSIONS ARE IN INCHES	ORIGINAL DATE	DATE	APPROVAL
FRACTIONS	APR 27 1965	12-1-65	W. J. H. H.
DECIMALS			
ANGLES			
MATERIAL			
TEST TREATMENT			
NEXT ASSY			
USED ON			
APPLICATION			

LOGIC DIAGRAM
DATA LINK
COUNT CLOCK TYPE I
SATURN V

GEORGE C. MARSHALL
SPACE FLIGHT CENTER
NATIONAL AERONAUTICS
AND SPACE ADMINISTRATION
HUNTSVILLE, ALABAMA

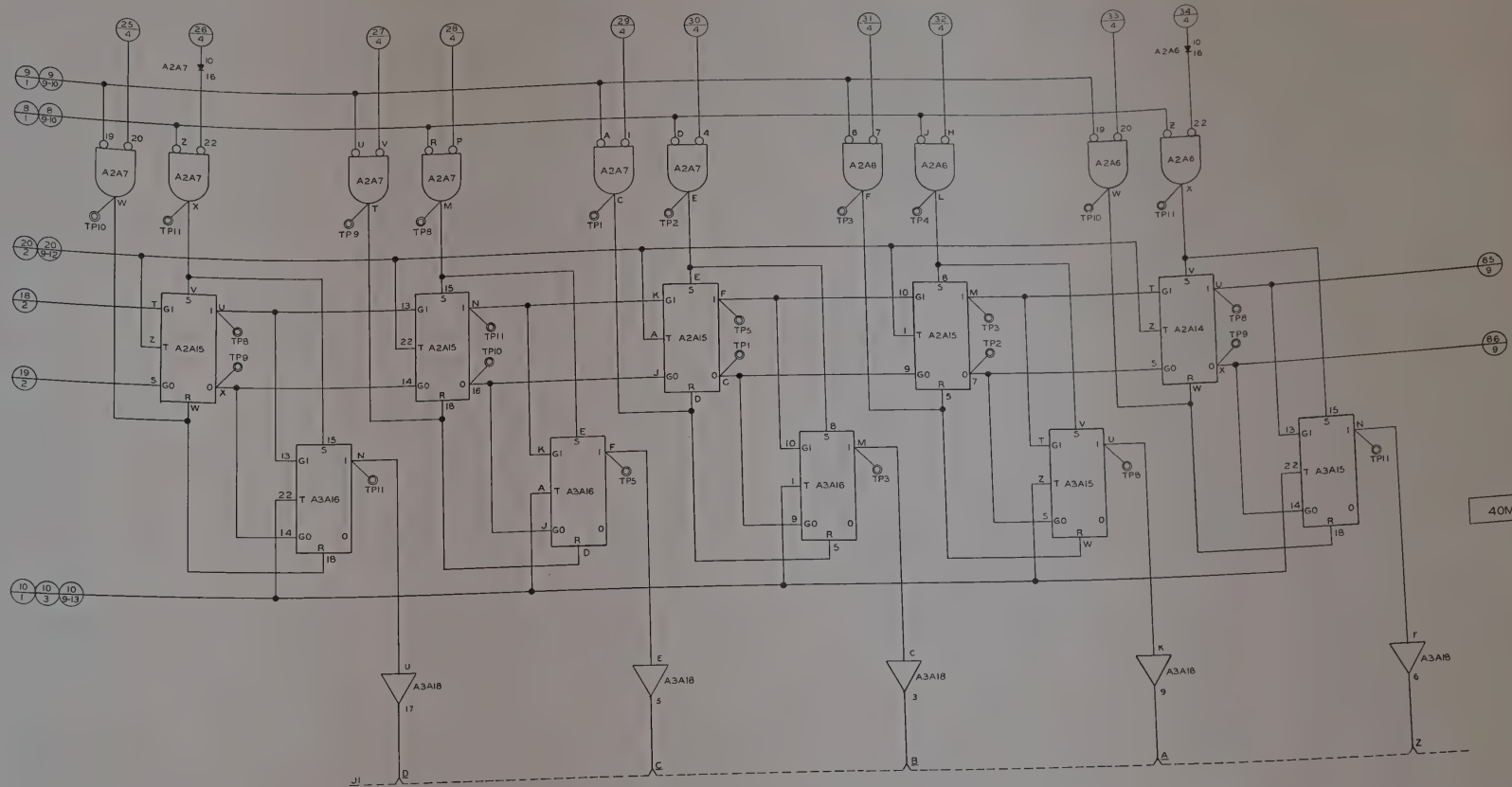
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SCALE 1/8" = 1" WEIGHT 5/16" SP

Change Date
30 November, 1966

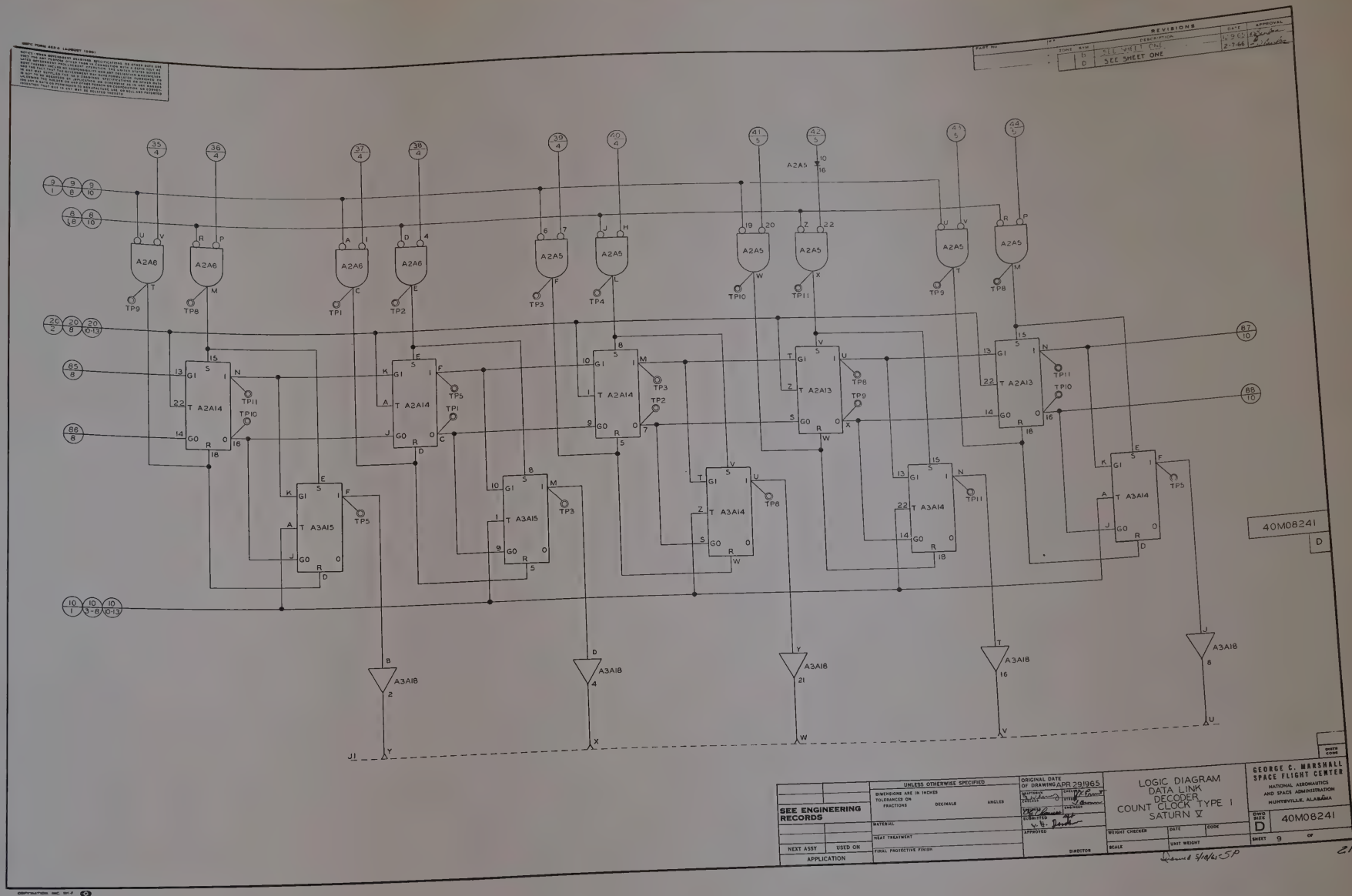
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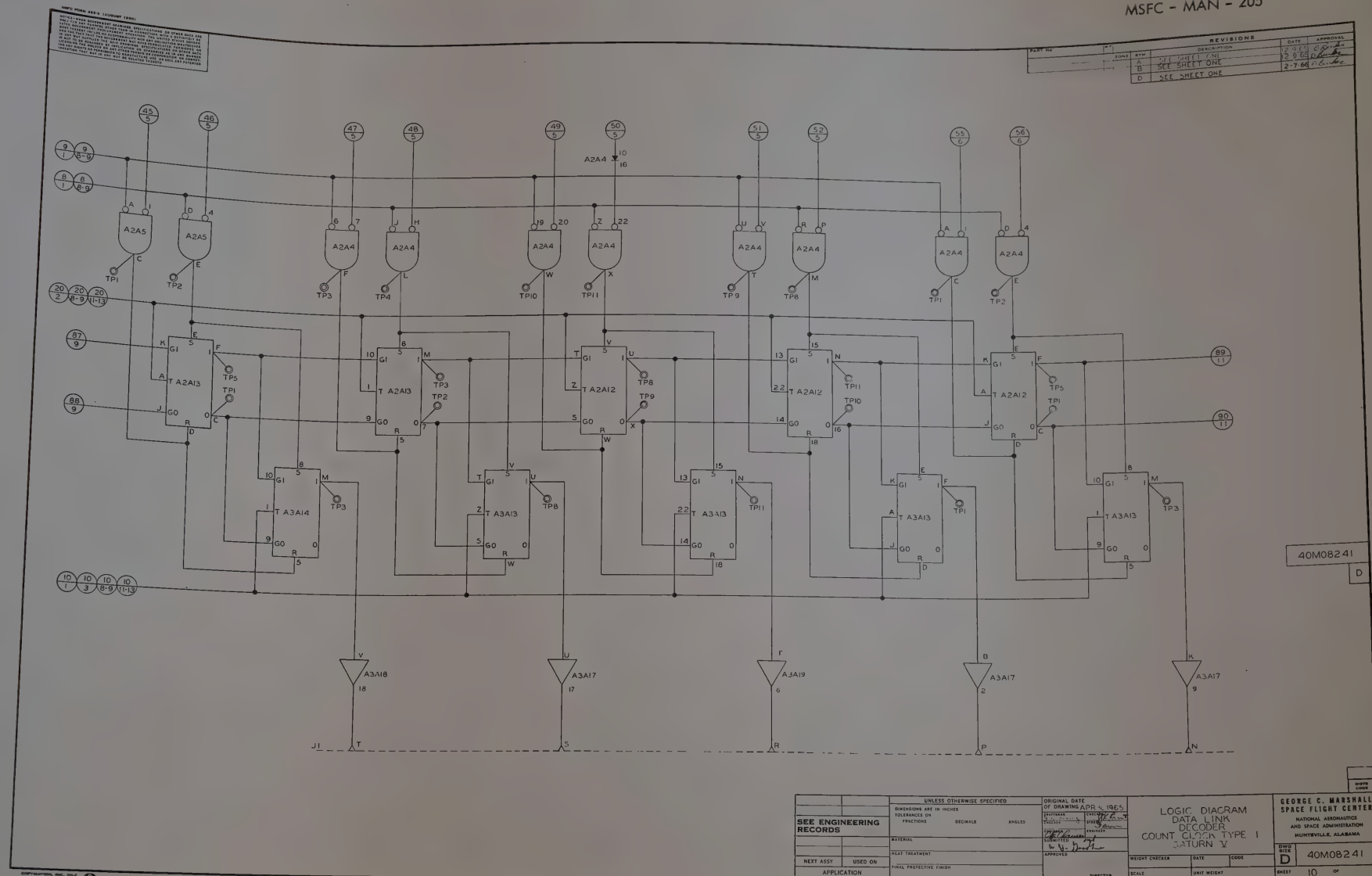
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REV	DATE	BY	APPROVAL
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D	2-7-66	W. H. H.	



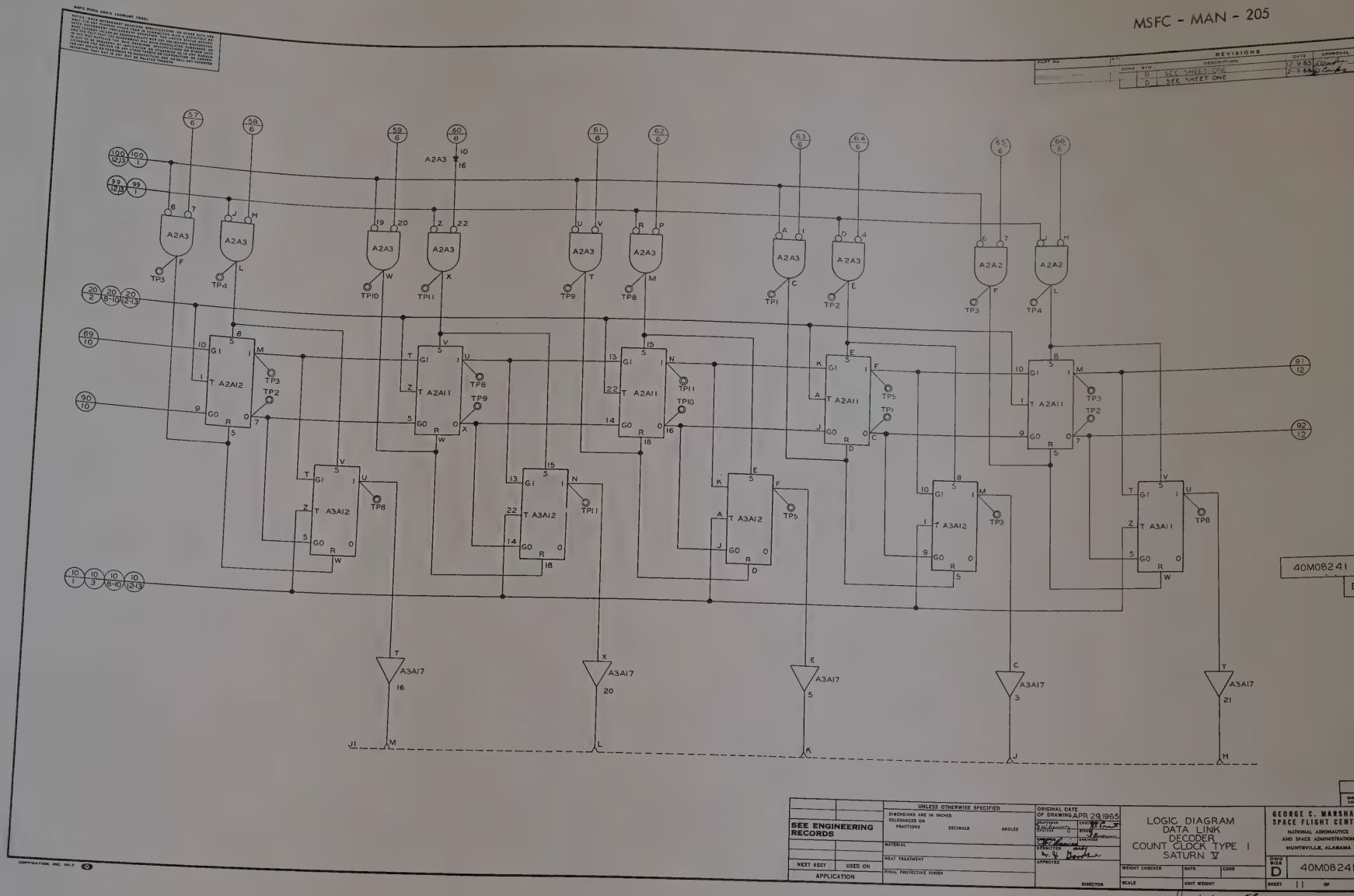
SEE ENGINEERING RECORDS		UNLESS OTHERWISE SPECIFIED		ORIGINAL DATE OF DRAWING APR 28 1965		LOGIC DIAGRAM DATA LINK DECODER COUNT CLOCK TYPE 1 SATURN V		GEORGE C. MARSHALL SPACE FLIGHT CENTER NATIONAL AERONAUTICS AND SPACE ADMINISTRATION HUNTSVILLE, ALABAMA	
DIMENSIONS ARE IN INCHES		TOLERANCES ON FRACTIONS		DECIMALS		ANGLES		DRAWN BY D	
MATERIAL		FINISH		DATE		CHECKED BY		DATE	
NEXT ASSY		USED ON		FINAL PROTECTIVE FINISH		DIRECTOR		SCALE	
APPLICATION		DATE		CODE		WEIGHT		SHEET	

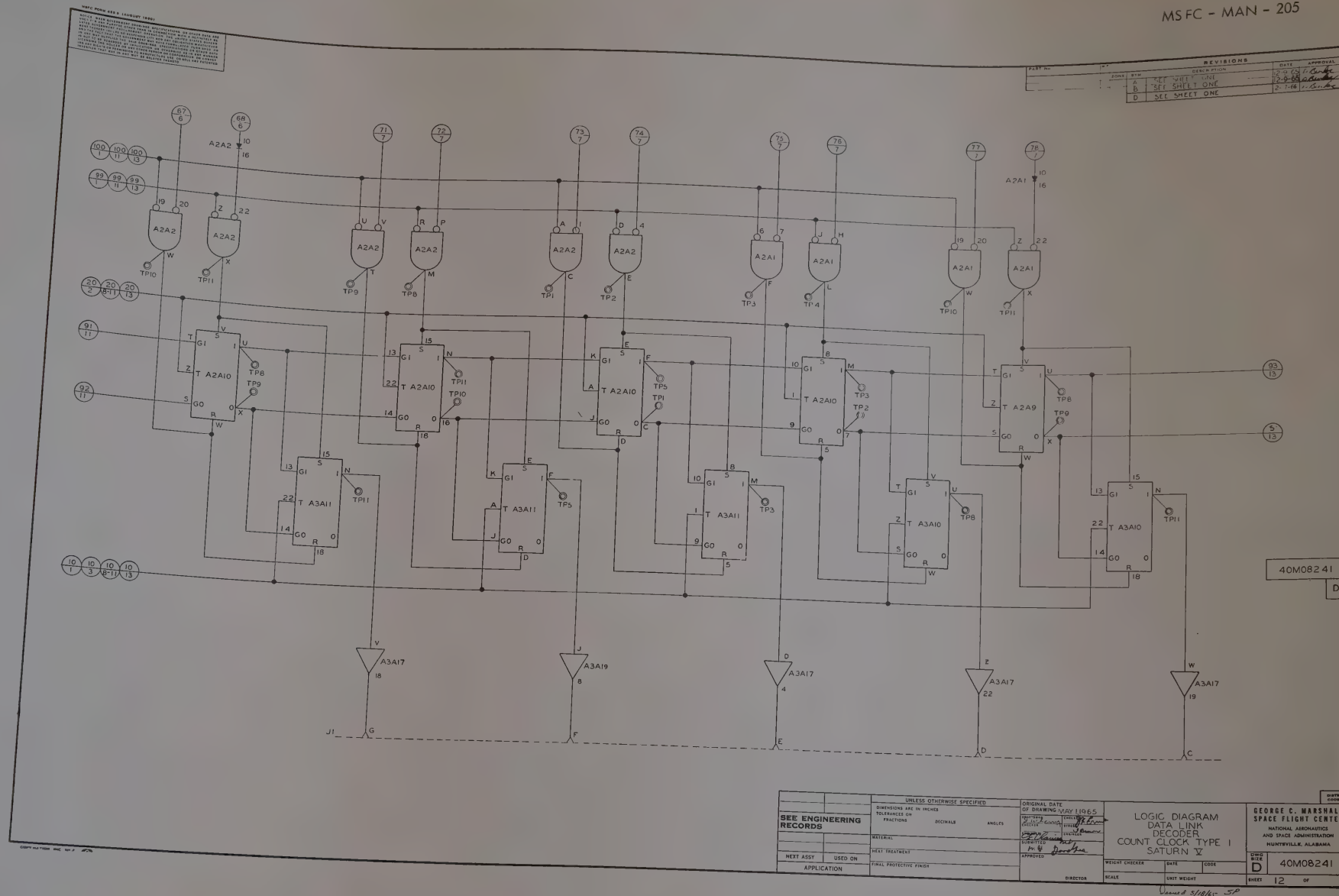
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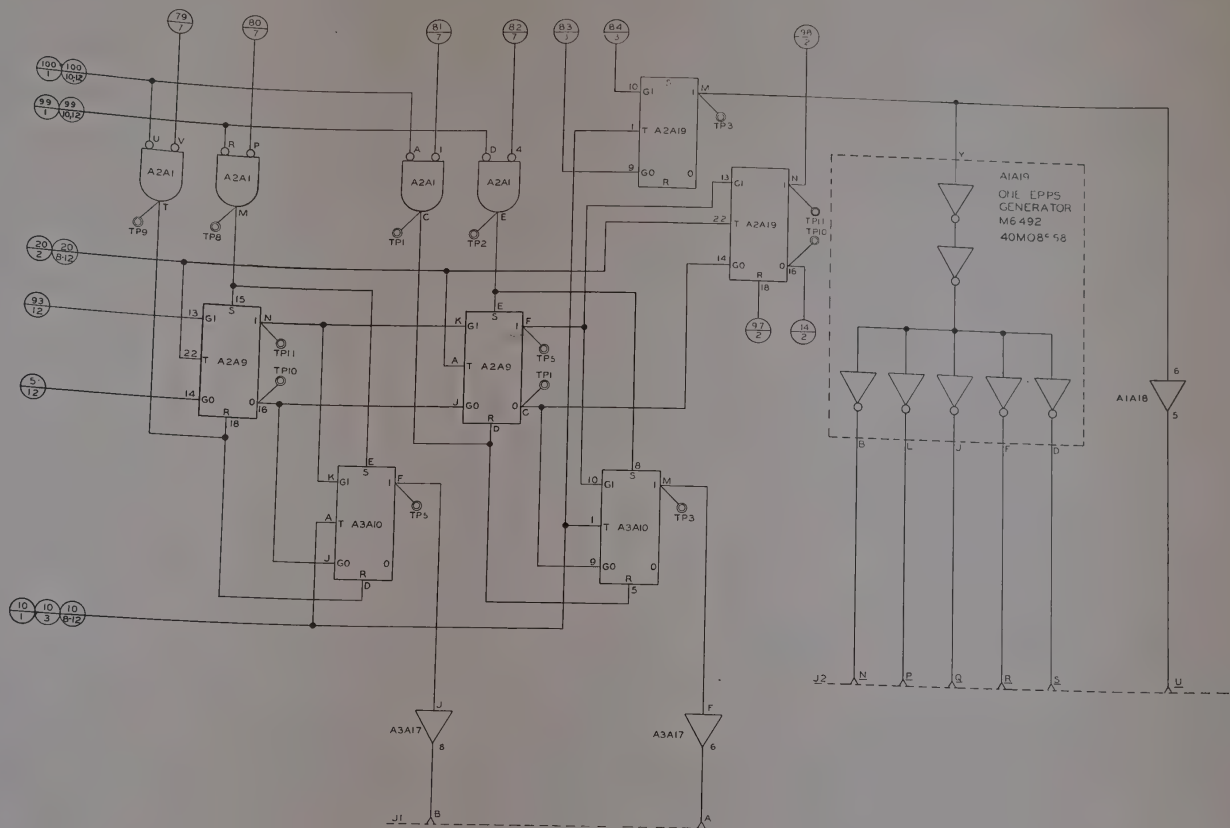




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40M08241

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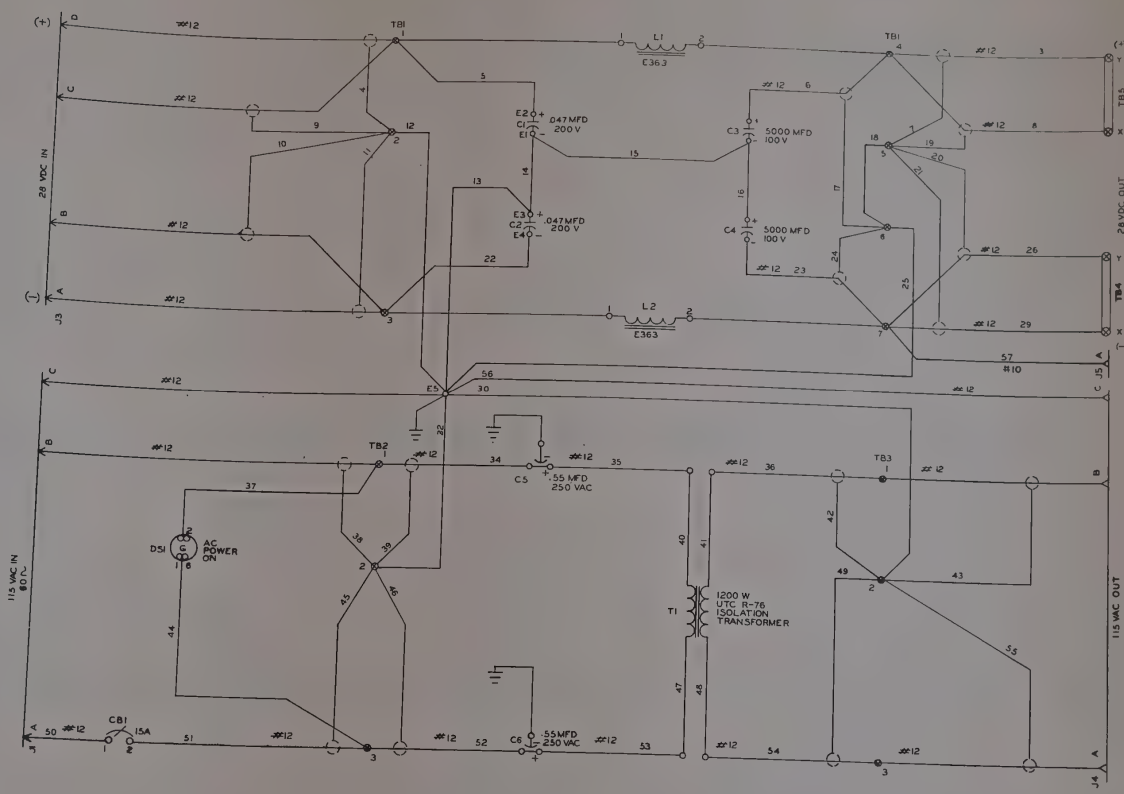
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DIMENSIONS ARE IN INCHES TOLERANCES ON FRACTIONS		ANGLES				DRAWN BY: [Signature] CHECKED BY: [Signature] DATE: 11/1/68 DESIGNED BY: [Signature] APPROVED BY: [Signature]	
SEE ENGINEERING RECORDS	MATERIAL		WEIGHT CHECKER		DATE	CODE	SHEET NO. 40M08241 OF 13
	HEAT TREATMENT		SCALE		UNIT WEIGHT		
NEXT ASY	USED ON	FINAL PROJECTING FINISH		DIRECTION			
APPLICATION							

Issued 5/10/65 ST

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REV	DATE	DESCRIPTION	APPROVAL
A	10-11-65	EC SP-517	
B	10-11-65	EC SP-517	
C	10-11-65	EC SP-517	
D	10-11-65	EC SP-517	
E	10-11-65	EC SP-517	
F	10-11-65	EC SP-517	

- NOTES
1. WIRE IN ACCORDANCE WITH STANDARD DWG 40M00200
 2. LAST WIRE NO. USED 57.
 3. ALL WIRE TO BE #20 UNLESS OTHERWISE SPECIFIED



40M08243

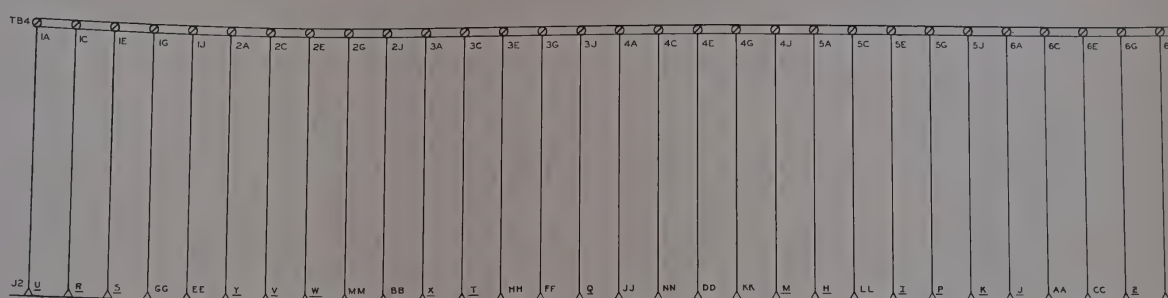
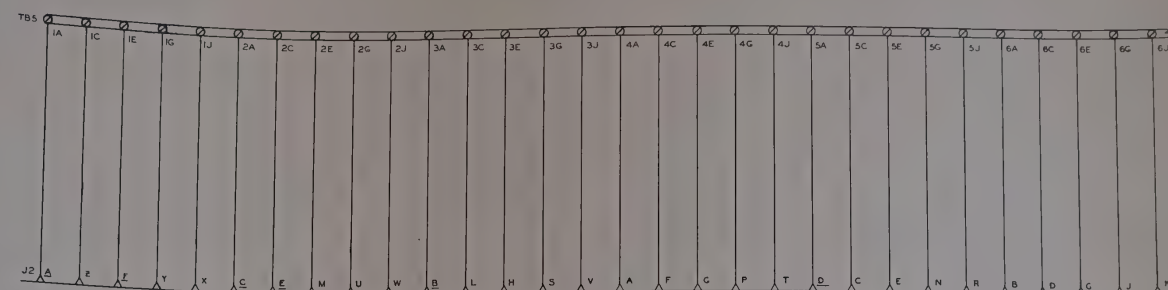
MOD KIT NO.	ECP NO.	DATE INC.
	09-550	
	10-553	

SEE ENGINEERING RECORDS		UNLESS OTHERWISE SPECIFIED		ORIGINAL DATE OF DRAWING: MAR. 5, 65		ADVANCED ELECTRICAL UNIT SCHEMATIC POWER FILTER TYPE I SATURN II		GEORGE C. MARSHALL SPACE FLIGHT CENTER	
NEXT ASSY		DIMENSIONS ARE IN INCHES		TOLERANCES ARE IN INCHES		NATIONAL AERONAUTICS AND SPACE ADMINISTRATION		HUNTSVILLE, ALABAMA	
USED ON		MATERIAL		DECIMALS		ANGLES		D 40M08243	
APPLICATION		REMARKS		FINAL PROTECTIVE FILM		APPROVED		SHEET 1 OF 2	

MSFC - MAN - 205

REVISIONS
 1. **DATE** 2-7-66
 2. **DATE** 2-7-66
 3. **DATE** 2-7-66
 4. **DATE** 2-7-66
 5. **DATE** 2-7-66
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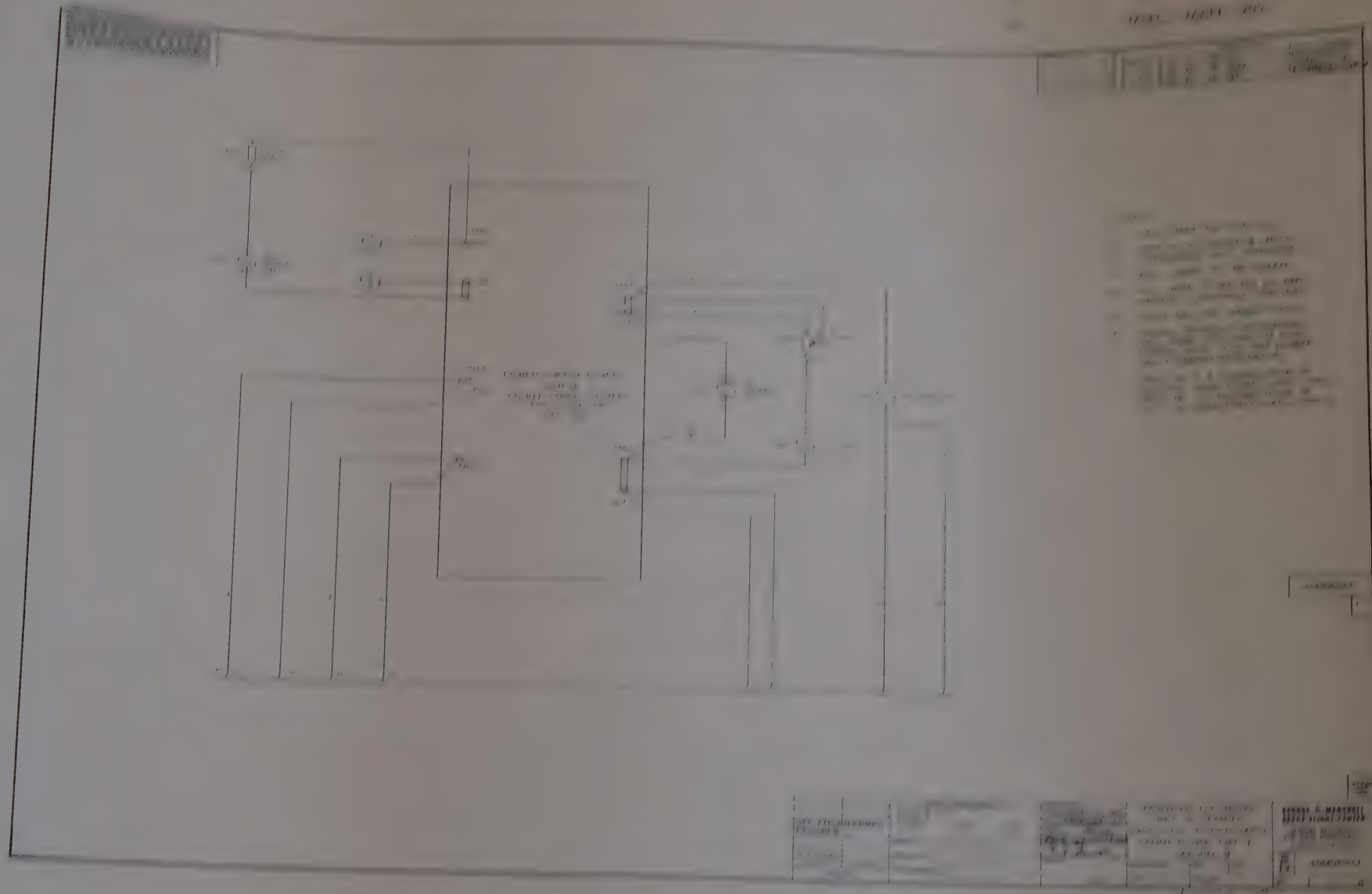
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4	2-7-66	ING TO SP-288	2-7-66
5	2-7-66	ING TO SP-288	2-7-66
6	2-7-66	ING TO SP-288	2-7-66
7	2-7-66	ING TO SP-288	2-7-66
8	2-7-66	ING TO SP-288	2-7-66
9	2-7-66	ING TO SP-288	2-7-66
10	2-7-66	ING TO SP-288	2-7-66



40M08243
 E

UNLESS OTHERWISE SPECIFIED		ORIGINAL DATE OF DRAWING APRIL 9, 65	ADVANCED ELECTRICAL UNIT SCHEMATIC POWER FILTER COUNT CLOCK TYPE I SATURN IV	GEORGE C. MARSHALL SPACE FLIGHT CENTER NATIONAL AERONAUTICS AND SPACE ADMINISTRATION HUNTSVILLE, ALABAMA
SEE ENGINEERING RECORDS	DIMENSIONS ARE IN INCHES TOLERANCES OR FRACTIONS DECIMALS ANGLES	DATE 2-7-66 BY N. V. Smith		
MATERIAL	HEAT TREATMENT	APPROVED	WEIGHT CHECKED	DATE
NEXT ASST	USED ON	FINAL PROTECTIVE FINISH	SCALE	UNIT WEIGHT
APPLICATION		DIRECTOR	SHEET 2 OF 2	

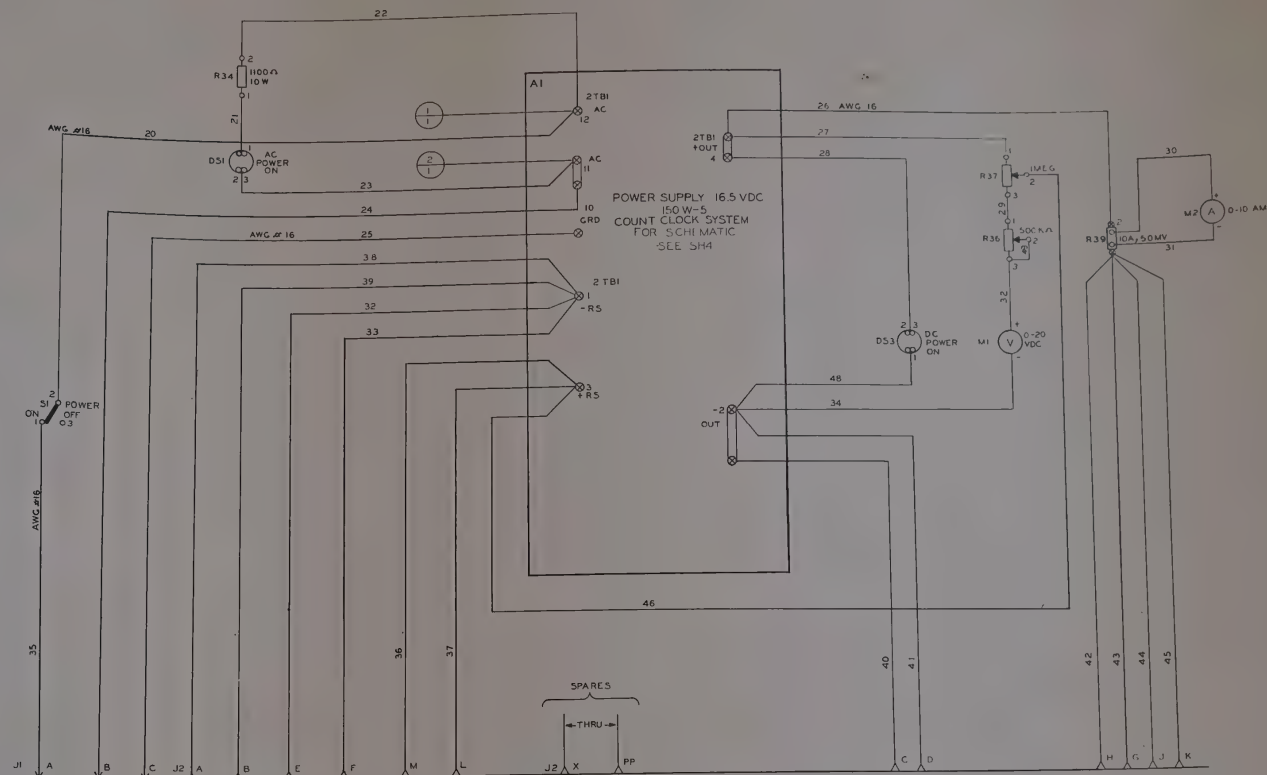
Change Date
 30 November, 1966



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WAGO FORM 100A (REV. 10-64)
 THIS FORM IS NOT TO BE USED FOR THE DESIGN OF A NEW UNIT OR THE MODIFICATION OF AN EXISTING UNIT. IT IS TO BE USED FOR THE RECORDING OF THE ELECTRICAL DATA OF A UNIT WHICH HAS BEEN DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE SPACE FLIGHT CENTER. THE DATA SHOULD BE RECORDED IN THIS FORM AS THE UNIT IS DESIGNED AND CONSTRUCTED. THE DATA SHOULD BE RECORDED IN THIS FORM AS THE UNIT IS DESIGNED AND CONSTRUCTED. THE DATA SHOULD BE RECORDED IN THIS FORM AS THE UNIT IS DESIGNED AND CONSTRUCTED.

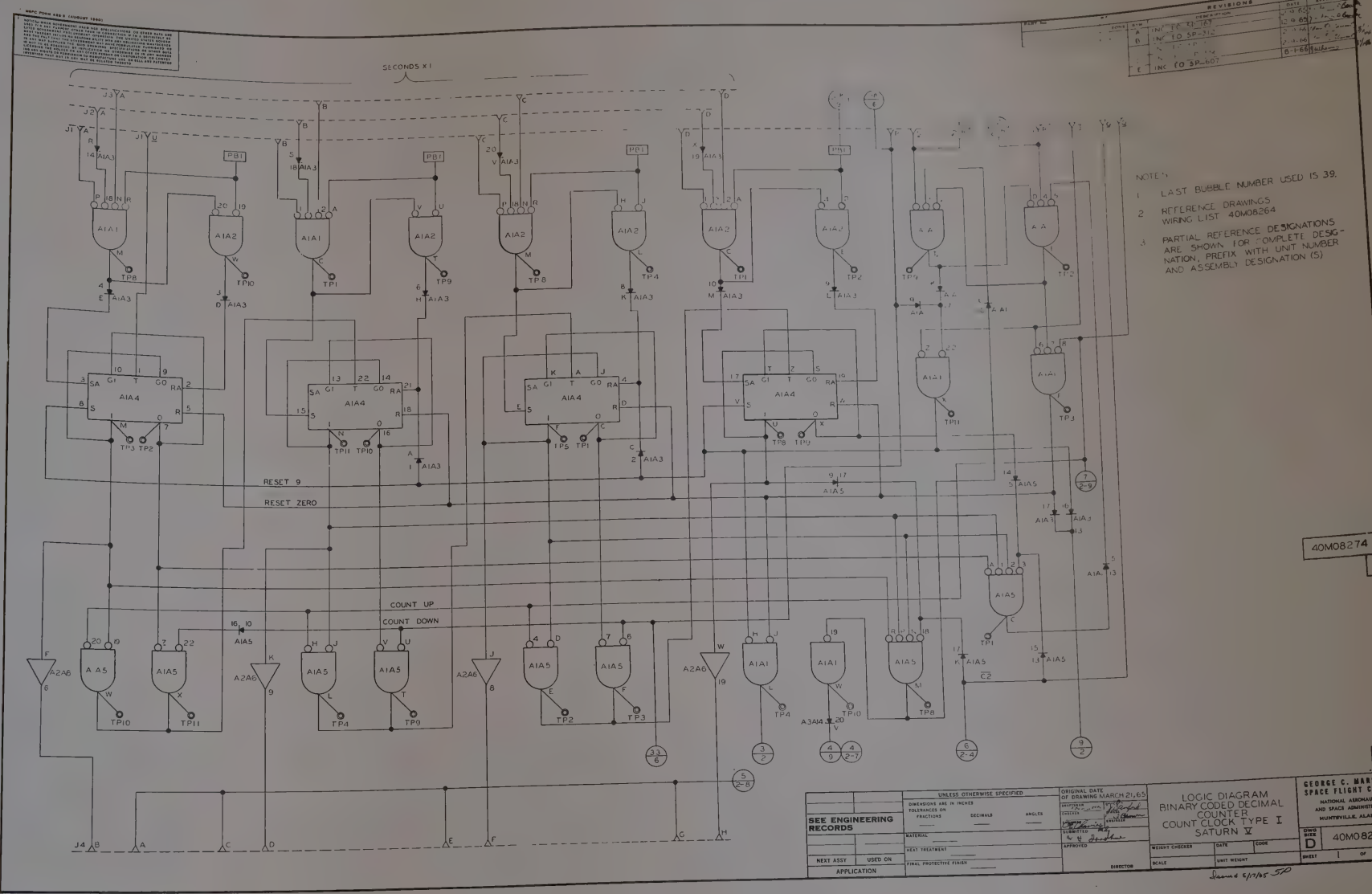
REVISIONS		DATE	APPROVAL
1	INC TO SP-23	10-10-64	J. C. G. / J. C. G.
2	INC TO SP-226	10-10-64	J. C. G. / J. C. G.
3	INC TO SP-587	10-10-64	J. C. G. / J. C. G.



40M08256

C

SEE ENGINEERING RECORDS		UNLESS OTHERWISE SPECIFIED		ORIGINAL DATE OF DRAWING: DEC 22, 1964		ADVANCED ELECTRICAL UNIT SCHEMATIC 12-16.5 VDC POWER SUPPLY COUNT CLOCK TYPE I		GEORGE C. MARSHALL SPACE FLIGHT CENTER NATIONAL AERONAUTICS AND SPACE ADMINISTRATION HUNTSVILLE, ALABAMA	
40M08256		NEXT ASSEMBLY USED ON		APPROVED		SIGNATURE: [Signature]		40M08256	
APPLICATION		FINAL PROTECTIVE INDEXED		DIRECTOR		REVIEW ENGINEER		DATE	
								SHEET 2 OF	



- NOTE:
1. LAST BUBBLE NUMBER USED IS 39.
 2. REFERENCE DRAWINGS WIRING LIST 40M08264
 3. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN FOR COMPLETE DESIGNATION. PREFIX WITH UNIT NUMBER AND ASSEMBLY DESIGNATION (S)

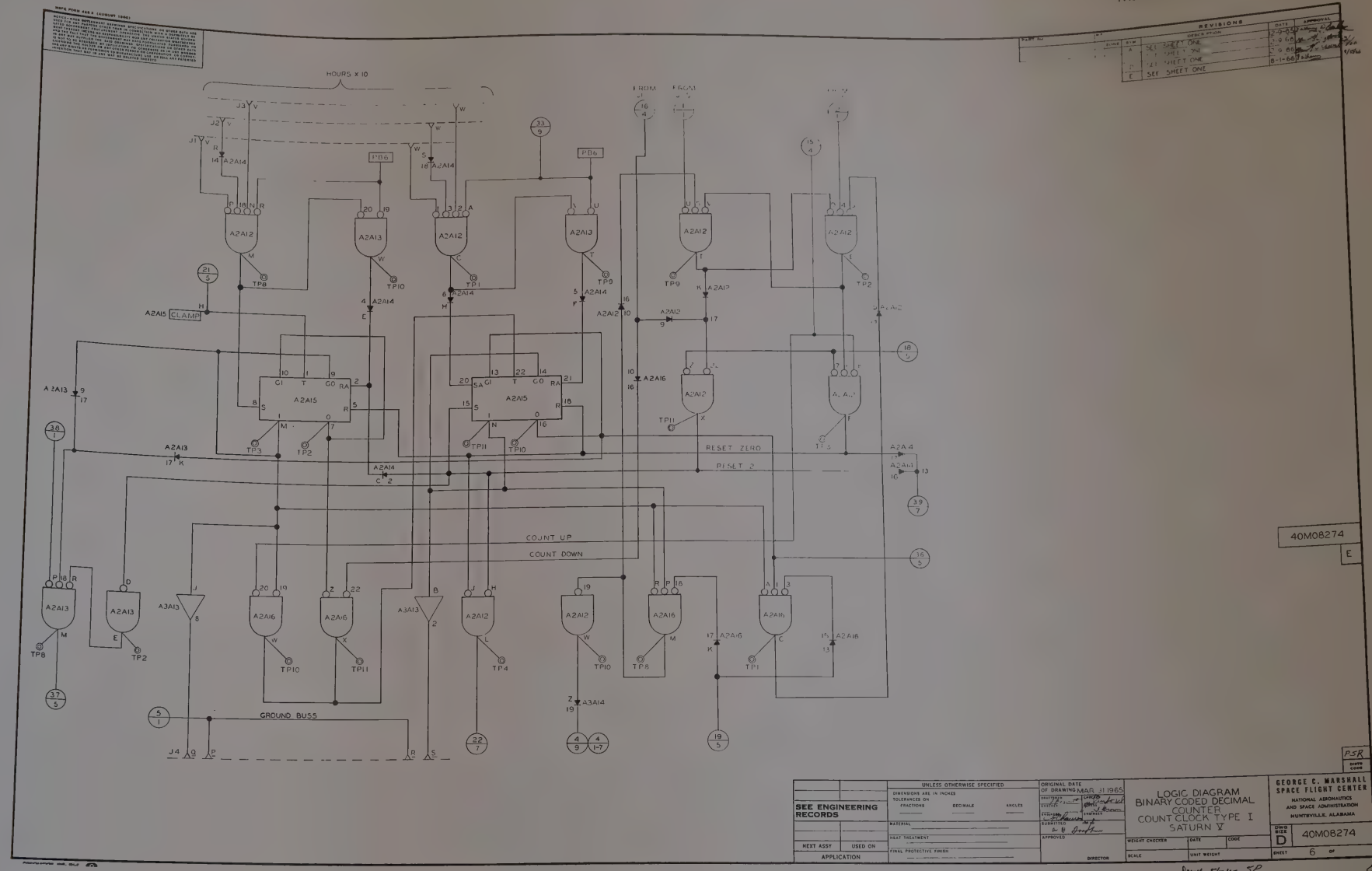
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MATERIAL		QUANTITIES	[Signature]	
NEXT TREATMENT		APPROVED BY	[Signature]	
NEXT ASSY USED ON		FINAL PROJECTIVE NUMBER	[Signature]	
APPLICATION		DIRECTOR	[Signature]	

LOGIC DIAGRAM BINARY CODED DECIMAL COUNTER COUNT CLOCK TYPE I SATURN V			
WEIGHT CHECKER	DATE	CODE	
SCALE	UNIT WEIGHT		
SIGNED 5/17/65 SP			

GEORGE C. MARSHALL SPACE FLIGHT CENTER	
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	
HUNTSVILLE, ALABAMA	
DRAWING NUMBER	40M08274
SHEET	1 OF 9

Change Date
30 November, 1966

MSFC - MAN - 205



REVISIONS			
REV	DATE	BY	APPROVAL
A	2-4-65	W	
B	3-9-65	W	
C	5-10-65	W	
D	8-1-66	W	
E	8-1-66	W	

40M08274
E

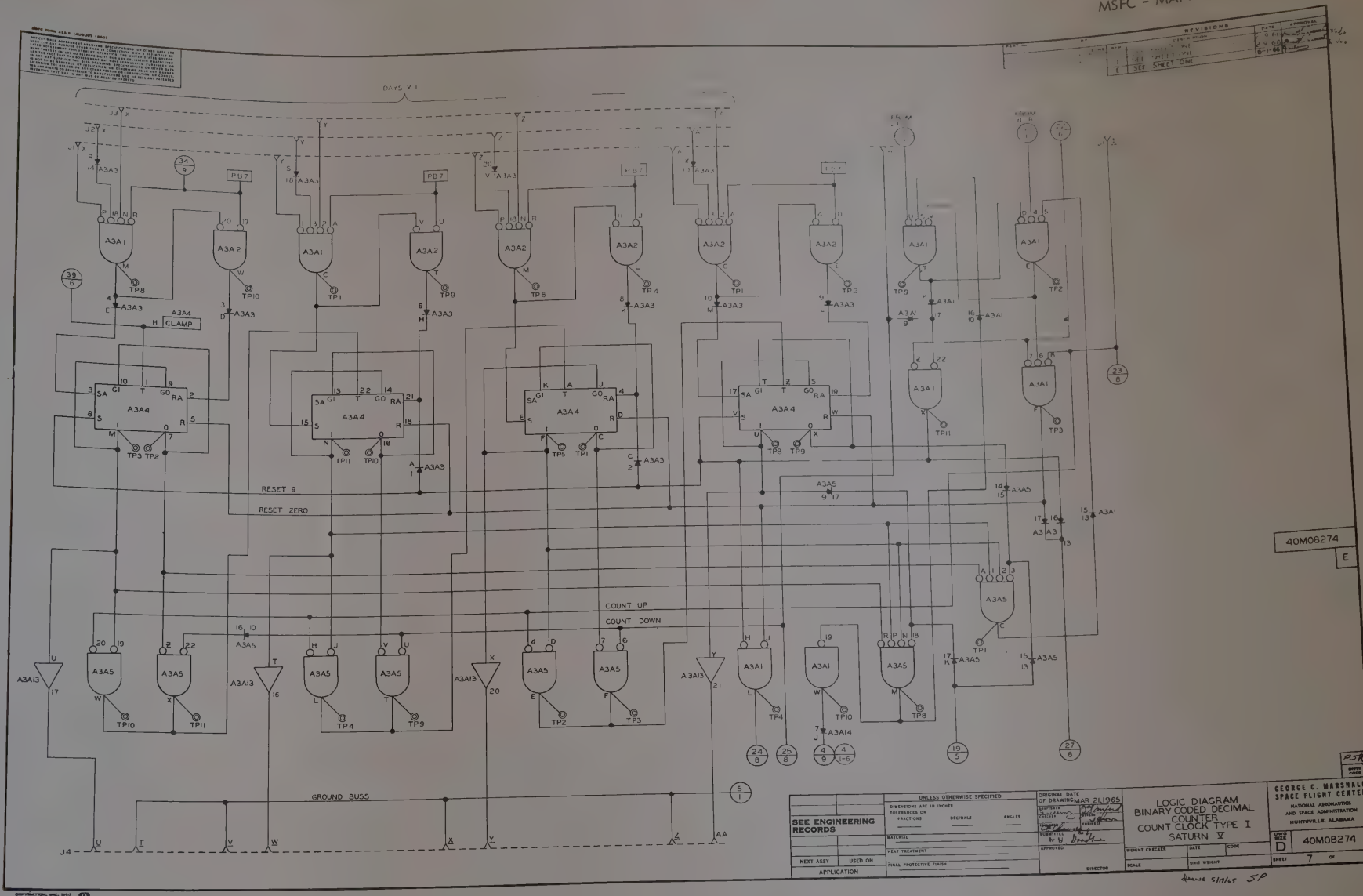
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FRACTIONS			CHECKED BY: [Signature]	
DECIMALS			APPROVED BY: [Signature]	
ANGLES			DATE: 8-1-66	
MATERIAL			BY: [Signature]	
HEAT TREATMENT			APPROVED: [Signature]	
FINAL PROTECTIVE FINISH			WEIGHT CHECKER: [Signature]	
NEXT ASST	USED ON	APPLICATION	DATE	CODE
			WEIGHT	UNIT WEIGHT
			PRICE	SHEET

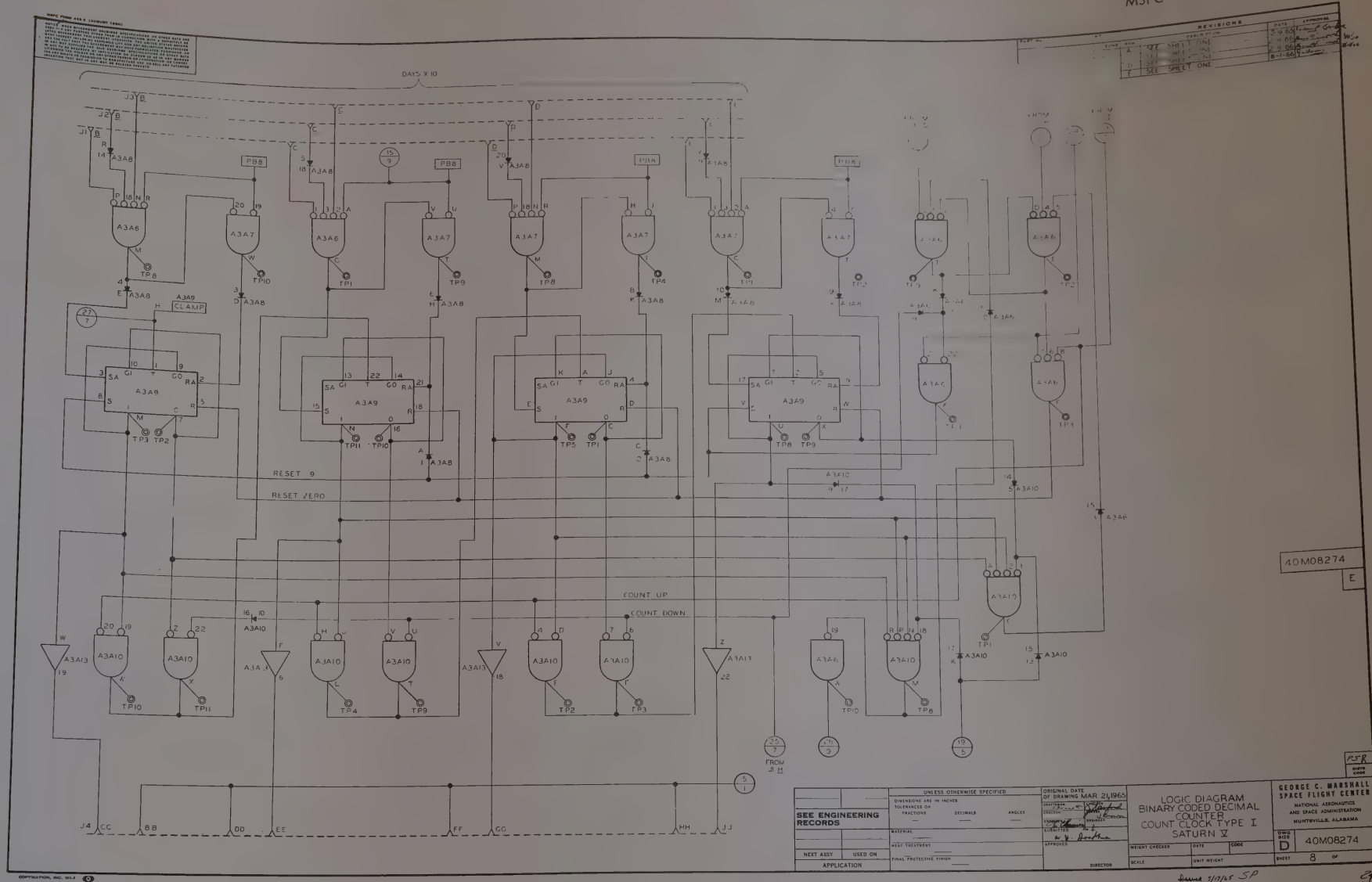
LOGIC DIAGRAM
BINARY CODED DECIMAL
COUNT CLOCK TYPE I
SATURN V

GEORGE C. MARSHALL
SPACE FLIGHT CENTER
NATIONAL AERONAUTICS
AND SPACE ADMINISTRATION
HUNTSVILLE, ALABAMA

40M08274
6 of 6

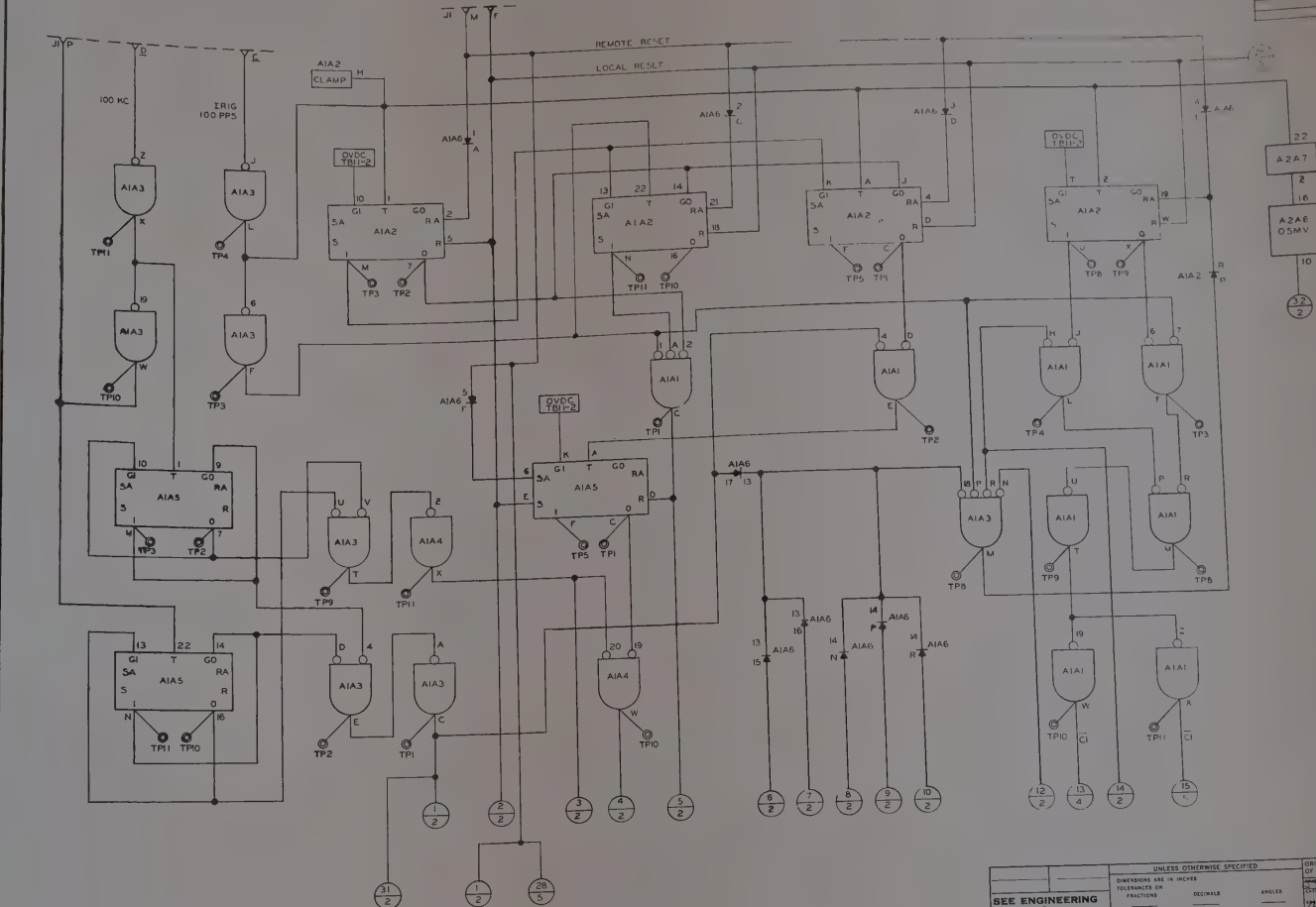
8-1-66 SP





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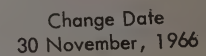
NOTES

1. LAST BALLOON NUMBER USED IS 32.
2. REFERENCE DRAWING: WIRING LIST 40M08263.
3. PARTIAL REFERENCE DESIGNATION, SHOWN FOR COMPLETE DESIGNATION, PREFIX WITH UNIT NUMBER AND ASSEMBLY DESIGNATION.
4. FOR ASSEMBLY DWG 40M08209.

MOD KIT NO.	ECP NO.	DATE INC
40M17200	09-484	
40M17200	10-402	
	09-485	
	10-403	

UNLESS OTHERWISE SPECIFIED		ORIGINAL DATE OF DRAWING APRIL 3, 65	LOGIC DIAGRAM SYNCHRONIZE & CONTROL COUNT CLOCK TYPE I SATURN V	GEORGE C. MARSHALL SPACE FLIGHT CENTER NATIONAL AERONAUTICS AND SPACE ADMINISTRATION HUNTSVILLE, ALABAMA DRAWING NO. D 40M08275 SHEET 1 OF 6
SEE ENGINEERING RECORDS	DIMENSIONS ARE IN INCHES TOLERANCES ON FRACTIONS	APPROVED: <i>[Signature]</i>		
NEXT ASSY	ON USED ON	DATE	WEIGHT CHECKED	CODE
APPLICATION	FINAL PROTECTIVE FINISH	UNIT WEIGHT	SCALE	4 inch 5/16" 5P

Change Date
30 November, 1966

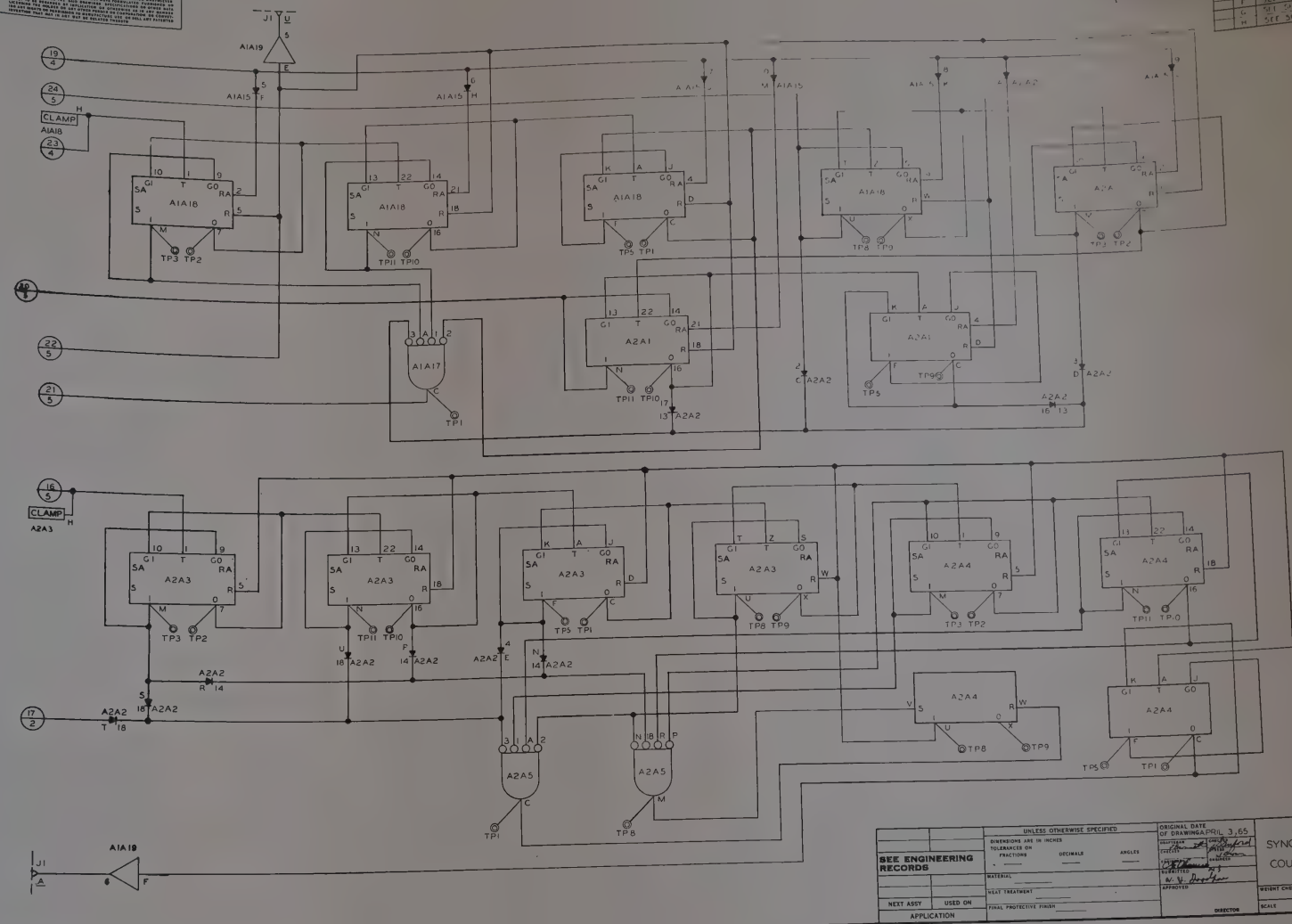


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FORM 1000-1 (REV. 1-65)

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REVISIONS		
NO.	DESCRIPTION	DATE
1	2-1964	2-1964
2	SEE SHEET ONE	8-1-64
3	SEE SHEET ONE	8-1-64
4	SEE SHEET ONE	8-1-64



40M08275

BEE ENGINEERING RECORDS		
DESIGNER	DATE	3-65
CHECKED	DATE	
APPROVED	DATE	
MATERIAL	DATE	
TEST TREATMENT	DATE	
FINAL PROTECTIVE FINISH	DATE	
APPLICATION	DATE	

LOGIC DIAGRAM
SYNCHRONIZE & CONTROL
COUNT CLOCK TYPE I
SATURN V

GEORGE C. MARSHALL
SPACE FLIGHT CENTER
NATIONAL AERONAUTICS
AND SPACE ADMINISTRATION
HUNTSVILLE, ALABAMA

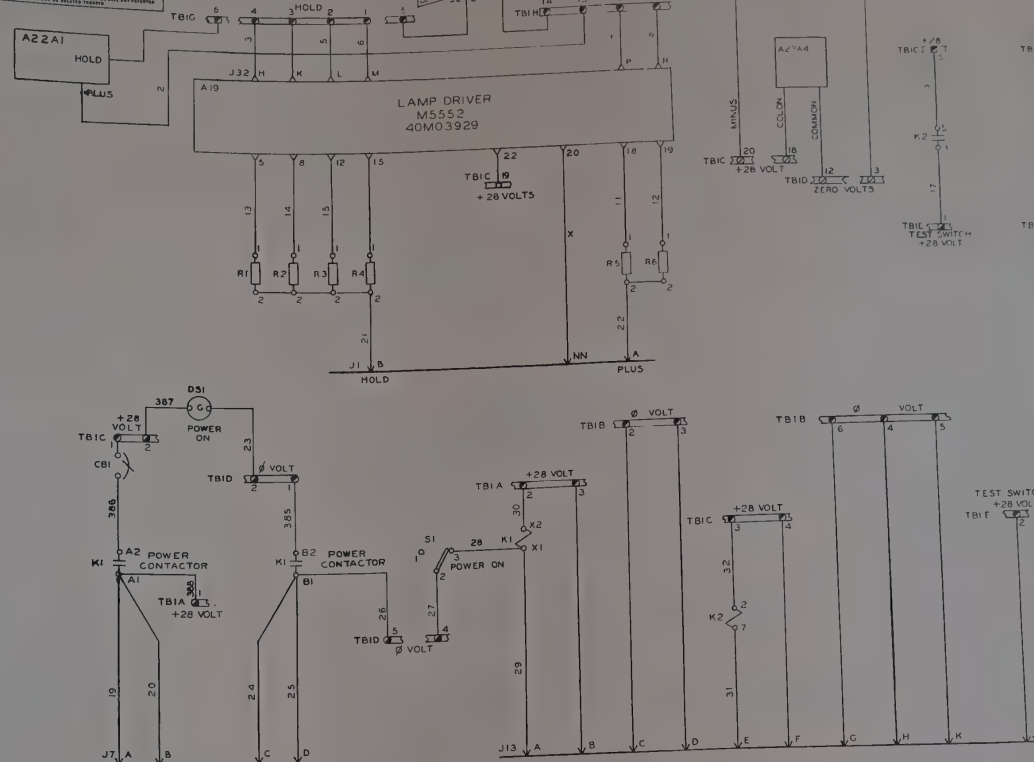
REVISION CHECKER DATE CODE
D 40M08275
6 of 6

Change Date
30 November, 1966

MSFC - MAN - 205

WPC FROM ASS. (LAMP) 1000

NOTE: THIS DRAWING SHOWS THE CONNECTIONS FOR THE LAMP DRIVER AND THE LAMP DRIVER IS A STANDARD 40M03929. THE LAMP DRIVER IS A STANDARD 40M03929. THE LAMP DRIVER IS A STANDARD 40M03929.



REVISIONS	DATE	APPROVAL
1	11-11-66	111k
2	11-11-66	111k
3	11-11-66	111k
4	11-11-66	111k
5	11-11-66	111k
6	11-11-66	111k
7	11-11-66	111k
8	11-11-66	111k
9	11-11-66	111k
10	11-11-66	111k

- NOTES:
1. WIRE IN ACCORDANCE WITH MSFC STANDARD 40M0200.
 2. LAST WIRE NUMBER USED 386.
 3. ALL WIRE TO BE NO. 20 AWG UNLESS OTHERWISE SPECIFIED. SEE NOTE 7.
 4. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN FOR COMPLETE NUMBER AND PREFIX WITH UNIT NUMBER AND ASSEMBLY DESIGNATIONS.
 5. MATCHING PINS ON CONNECTORS J2 THRU J6 AND J8 THRU J12 WILL BE WIRED (J2-A TO J3-A TO J4-A ETC).
 6. ALL RESISTORS ARE RL32AD681J (312 WATT 680 OHM, 5% TOLERANCE).
 7. ALL WIRING TO READOUT MODULES (A22A1-A22A12) TO BE NO. 22 AWG WHITE.

40M08280

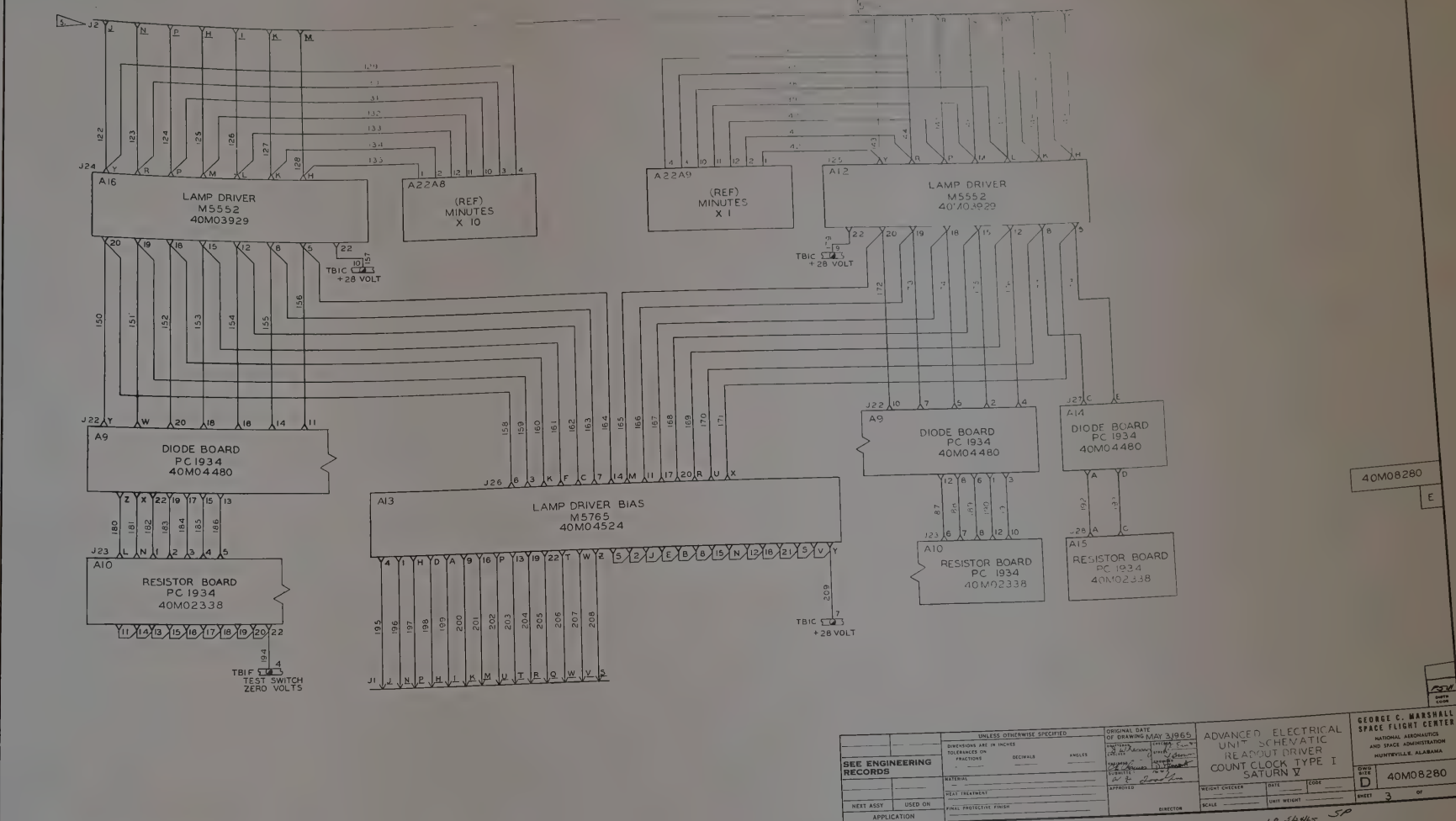
UNLESS OTHERWISE SPECIFIED		ORIGINAL DATE OF DRAWING 1-65	ADVANCED ELECTRICAL UNIT SCHEMATIC READOUT DRIVER COUNT CLOCK TYPE I SATURN V		GEORGE C. MARSHALL SPACE FLIGHT CENTER NATIONAL AERONAUTICS AND SPACE ADMINISTRATION HUNTSVILLE, ALABAMA	
SIZE D	40M08280	1	5	5	5	5
WEIGHT CHECKER	DATE	COD	WEIGHT	UNIT WEIGHT	WEIGHT	UNIT WEIGHT
SCALE	UNIT WEIGHT	WEIGHT	UNIT WEIGHT	WEIGHT	UNIT WEIGHT	UNIT WEIGHT

Change Date
30 November, 1966

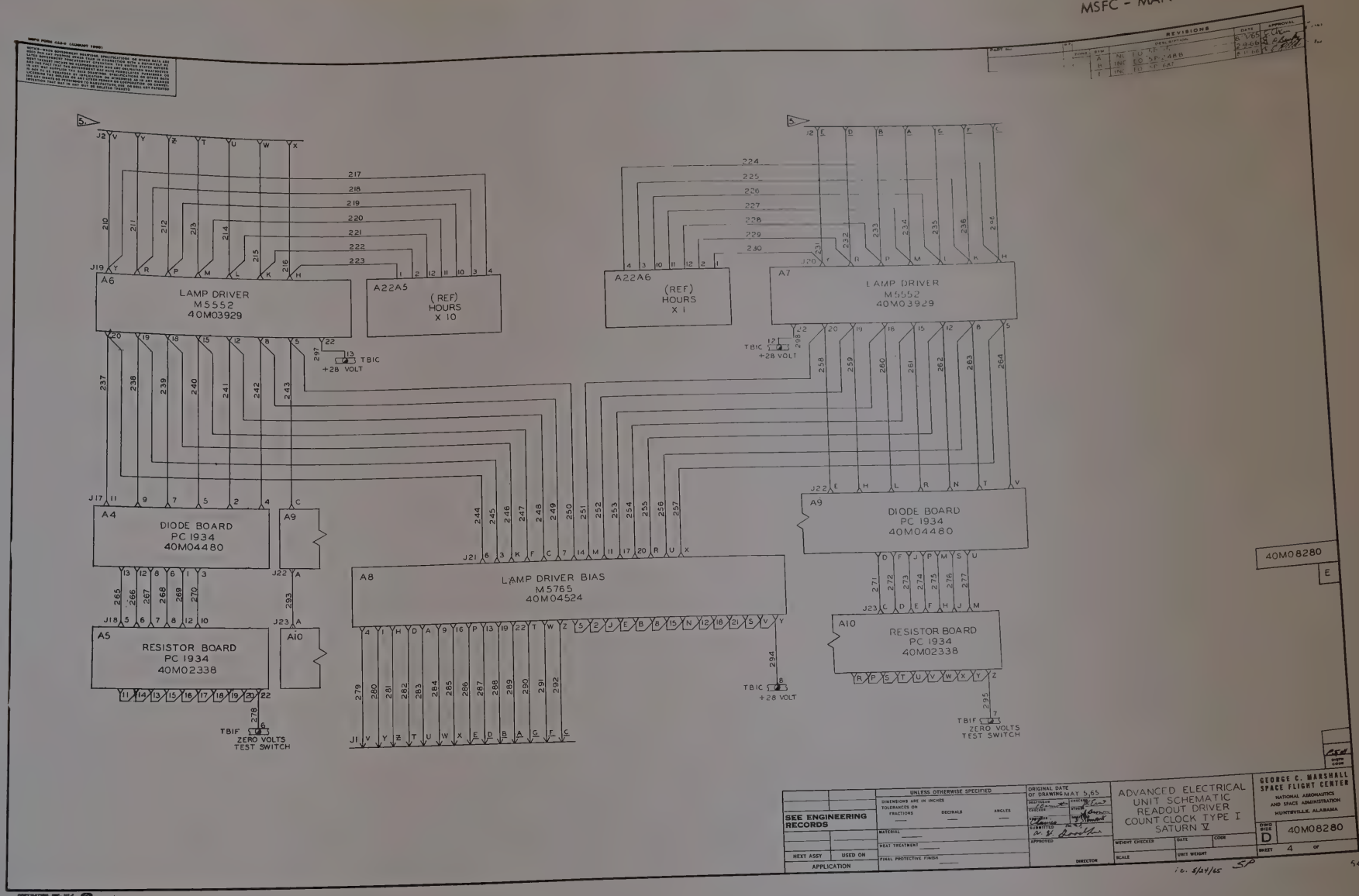


Change Date
30 November, 1966

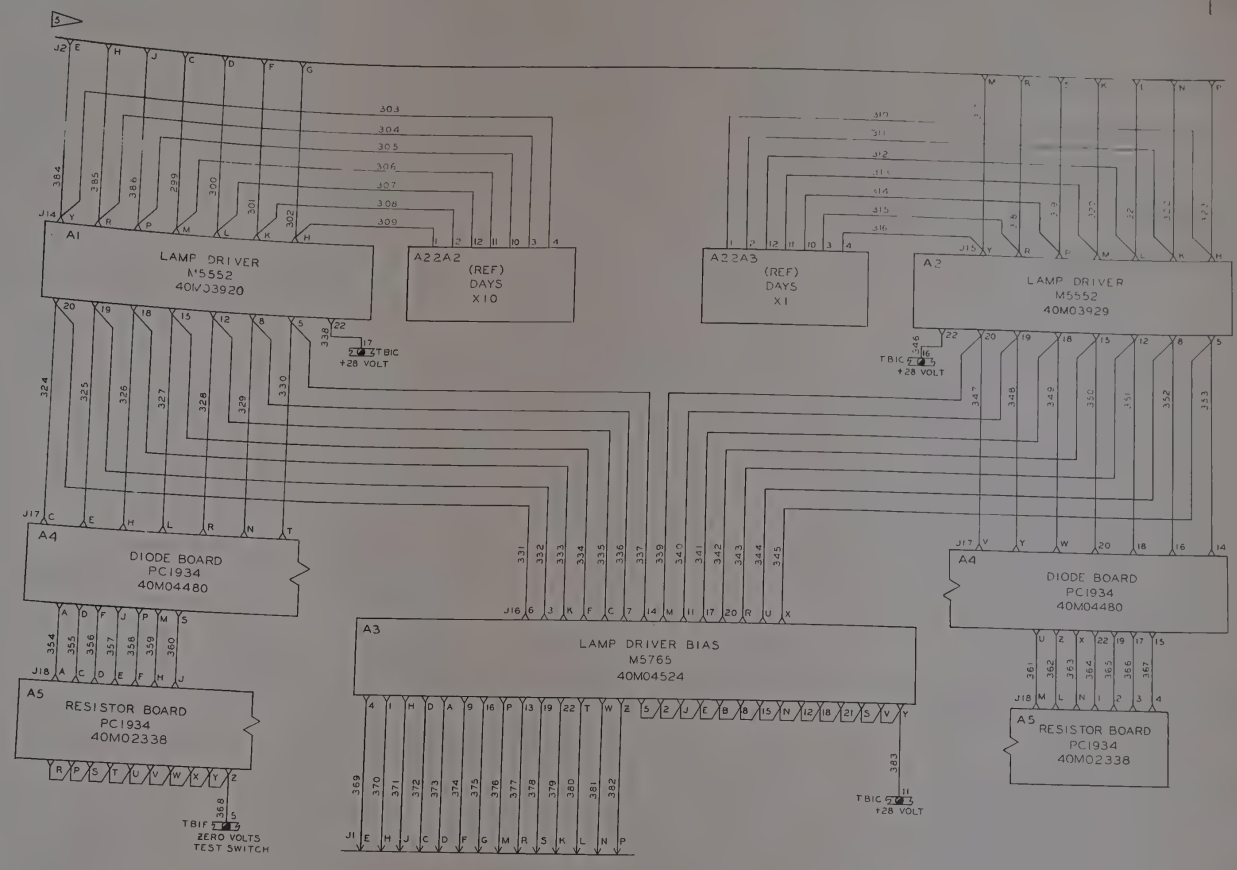
NOTE: THIS DRAWING IS A SCHEMATIC OF THE UNIT AND DOES NOT SHOW THE PHYSICAL LAYOUT OF THE COMPONENTS. THE PHYSICAL LAYOUT IS SHOWN IN THE MECHANICAL DRAWING. THE COMPONENTS ARE IDENTIFIED BY PART NUMBER AND QUANTITY. THE WIRING IS IDENTIFIED BY WIRE NUMBER AND COLOR. THE WIRING IS IDENTIFIED BY WIRE NUMBER AND COLOR. THE WIRING IS IDENTIFIED BY WIRE NUMBER AND COLOR.



UNLESS OTHERWISE SPECIFIED		ORIGINAL DATE OF DRAWING MAY 1965	ADVANCED ELECTRICAL UNIT SCHEMATIC READOUT DRIVER COUNT CLOCK TYPE I SATURN V		GEORGE C. MARSHALL SPACE FLIGHT CENTER NATIONAL AERONAUTICS AND SPACE ADMINISTRATION HUNTSVILLE, ALABAMA	
SEE ENGINEERING RECORDS	DIMENSIONS ARE IN INCHES TOLERANCES ON FRACTIONS	APPROVED [Signature]	DESIGNED BY [Signature]	DATE [Date]	CODE [Code]	UNIT WEIGHT [Weight]
NEXT ASSY	USED ON	FINAL PROTECTIVE FINISH	APPROVED [Signature]	DATE [Date]	CODE [Code]	UNIT WEIGHT [Weight]
APPLICATION		SHEET 3 OF 3		10 JAN 65 SP		



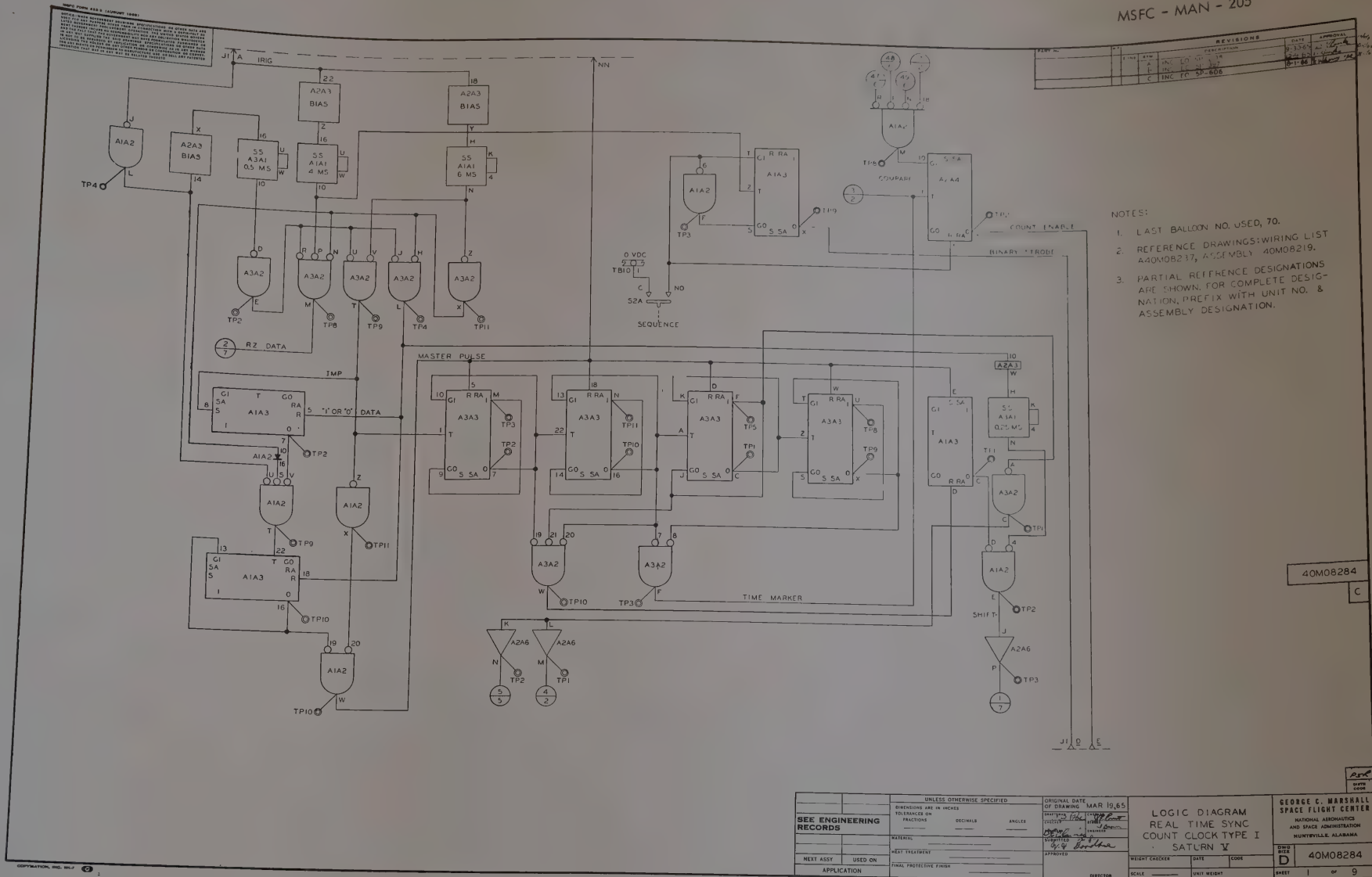
REVISIONS			DATE	APPROVAL
NO.	DESCRIPTION			
A	EO SP-15		8-3-65	STW
B	EO SP-248 B		2-9-66	STW
			8-11-66	STW



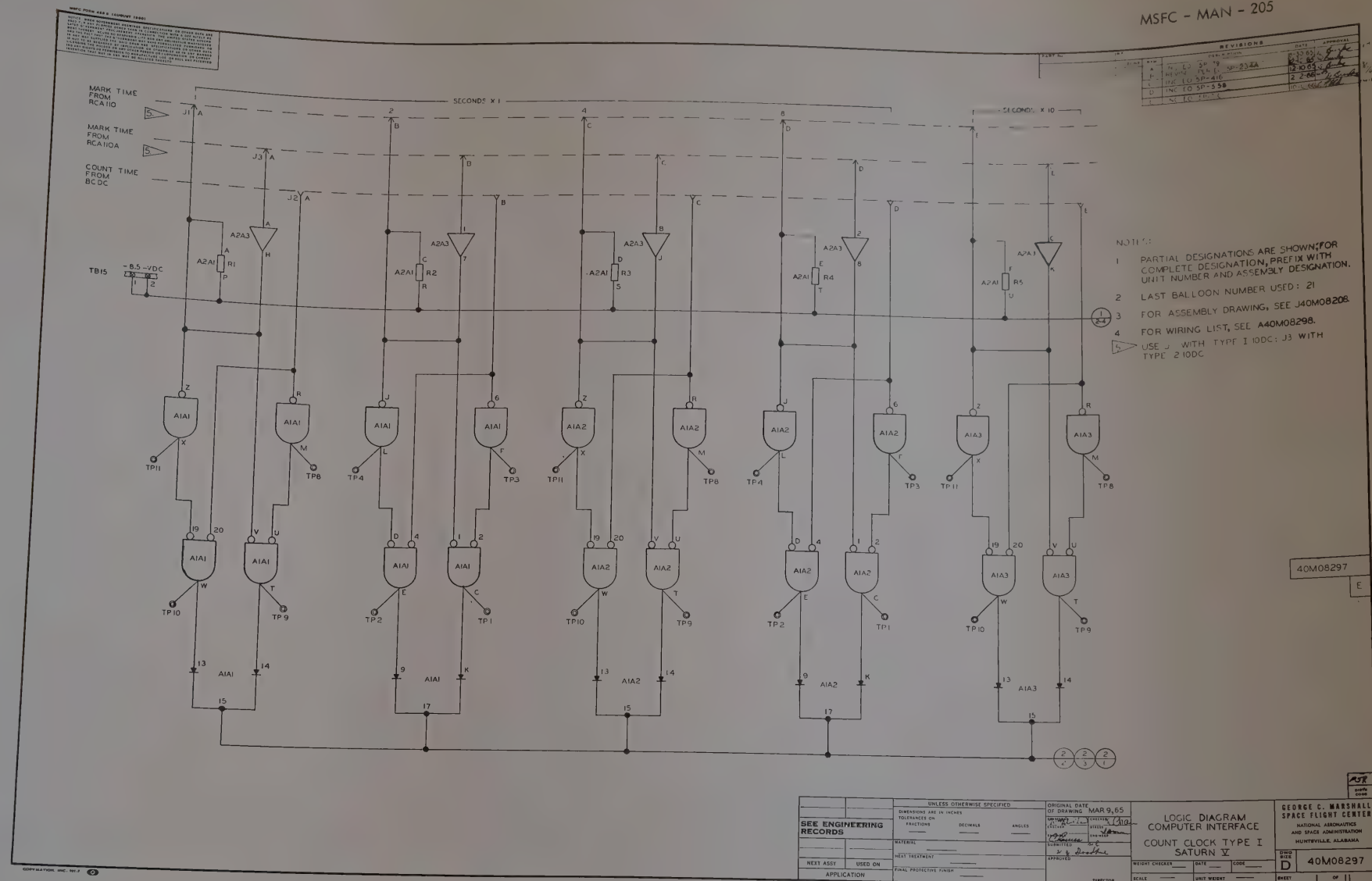
40M08280

[illegible]

i.e. 5/24/65 SP



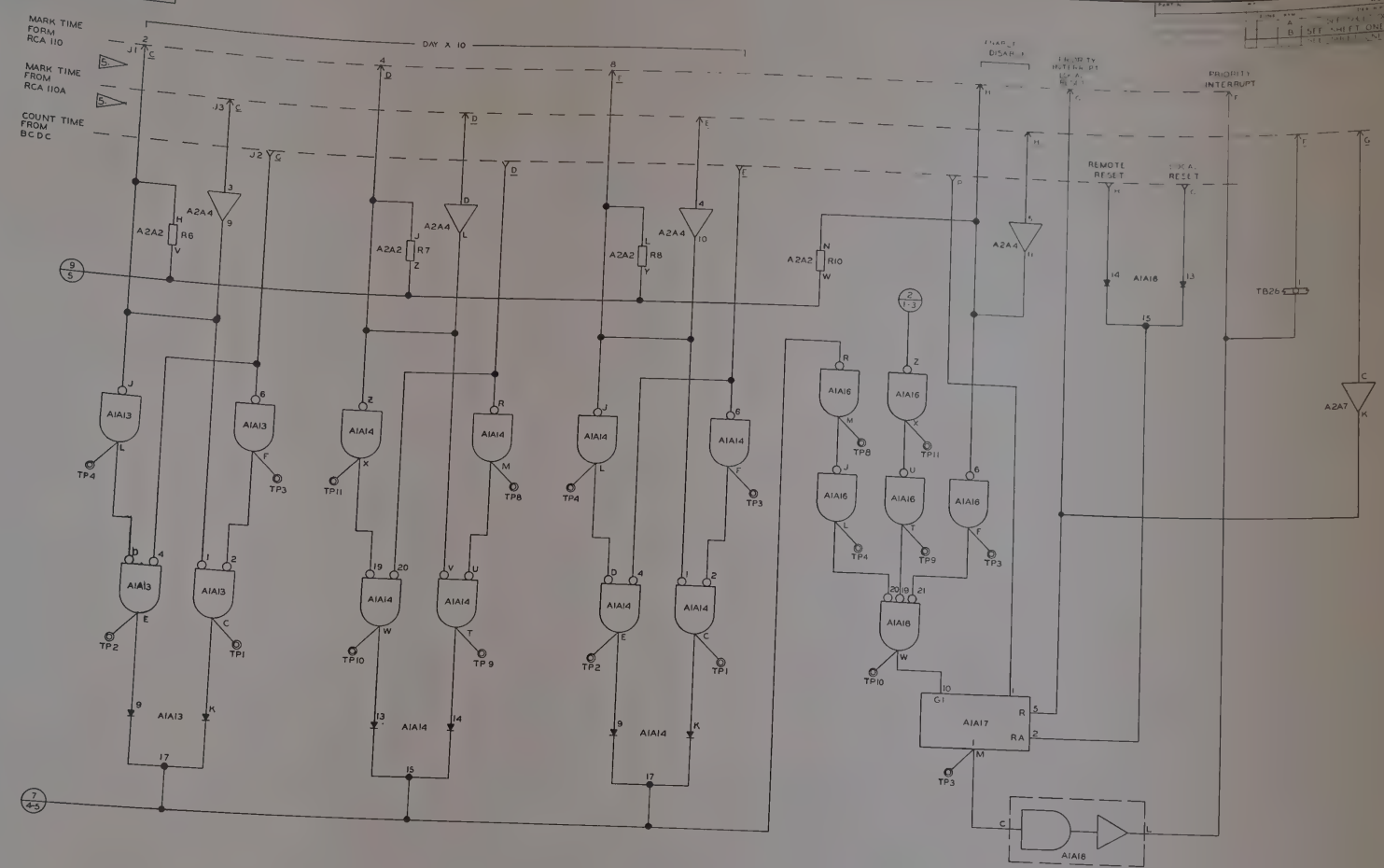
MSFC - MAIN - 205



MSFC - MAN - 205

MSFC FORM 100-1 (JANUARY 1965)
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REVISIONS		DATE	BY	APPROVED
1	A	12/10/65	W. J.
2	B	12/10/65	W. J.



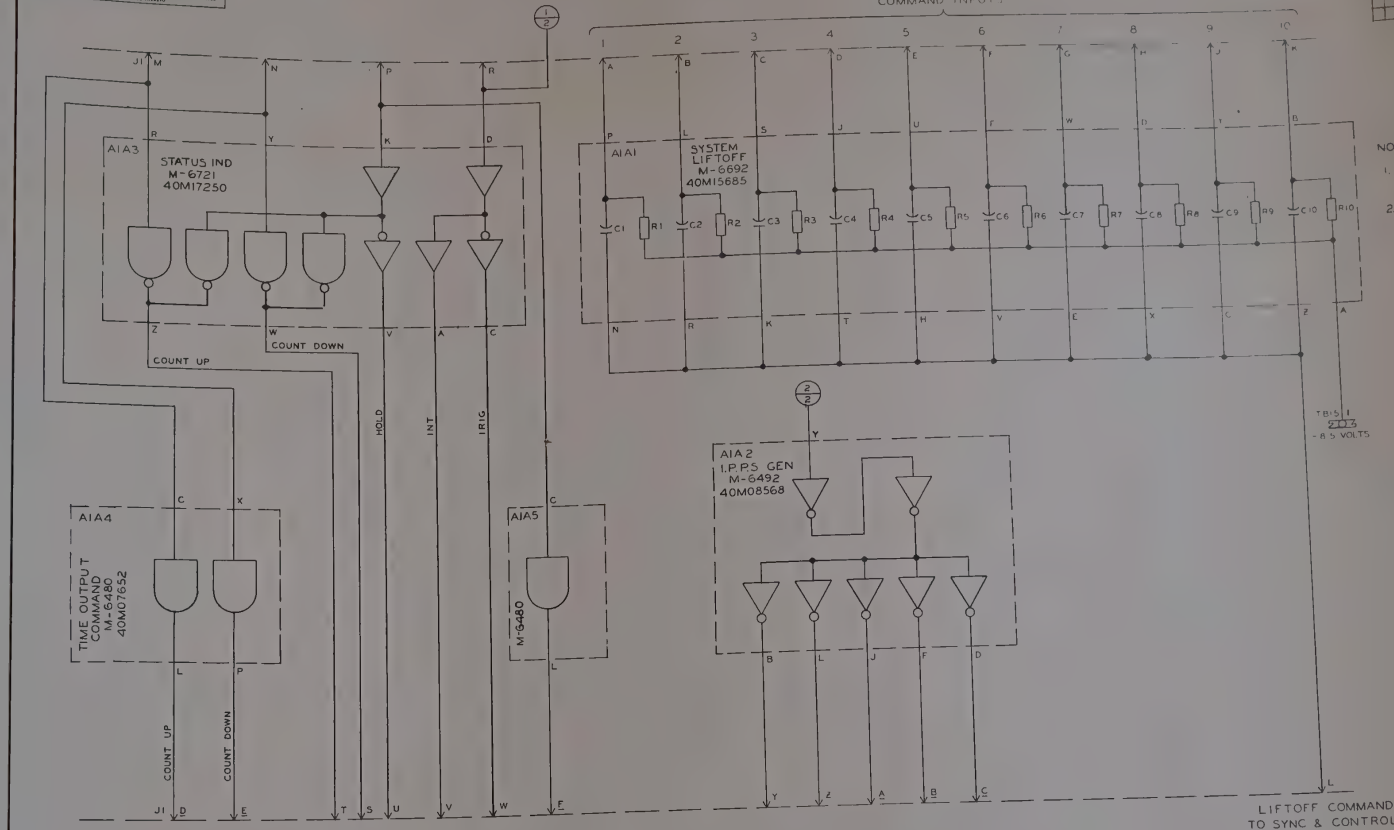
40M08297
 E

SEE ENGINEERING RECORDS		UNLESS OTHERWISE SPECIFIED		ORIGINAL DATE OF DRAWING MAR 10 1965		LOGIC DIAGRAM COMPUTER INTERFACE COUNT CLOCK TYPE I SATURN V		GEORGE C. MARSHALL SPACE FLIGHT CENTER NATIONAL AERONAUTICS AND SPACE ADMINISTRATION HUNTSVILLE, ALABAMA	
		DIMENSIONS ARE IN INCHES	TOLERANCES ON FRACTIONS	DECIMALS	ANGLES				
MATERIAL		HEAT TREATMENT		FINISH		APPROVED		BY V. ...	
NEXT ASSEMBLY USED ON		FINAL PROTECTIVE FINISH		DIRECTOR		WEIGHT CHECKER		DATE	
APPLICATION						SCALE		SHEET 6 OF 30	

MSFC - MAN - 205

UNLESS OTHERWISE SPECIFIED

NOTE: THIS DRAWING IS A LOGIC DIAGRAM. IT IS NOT A WIRING DIAGRAM. IT IS NOT TO BE USED FOR THE PURPOSE OF MANUFACTURING OR REPAIR. IT IS FOR INFORMATION ONLY.



- NOTES:
- REFERENCE DRAWINGS: WIRING LIST 40M08303, ASSEMBLY 40M08212.
 - PARTIAL REFERENCE DESIGNATIONS ARE SHOWN FOR COMPLETE DESIGNATION PREFIX WITH UNIT NO. AND ASSEMBLY DESIGNATION.

40M08302

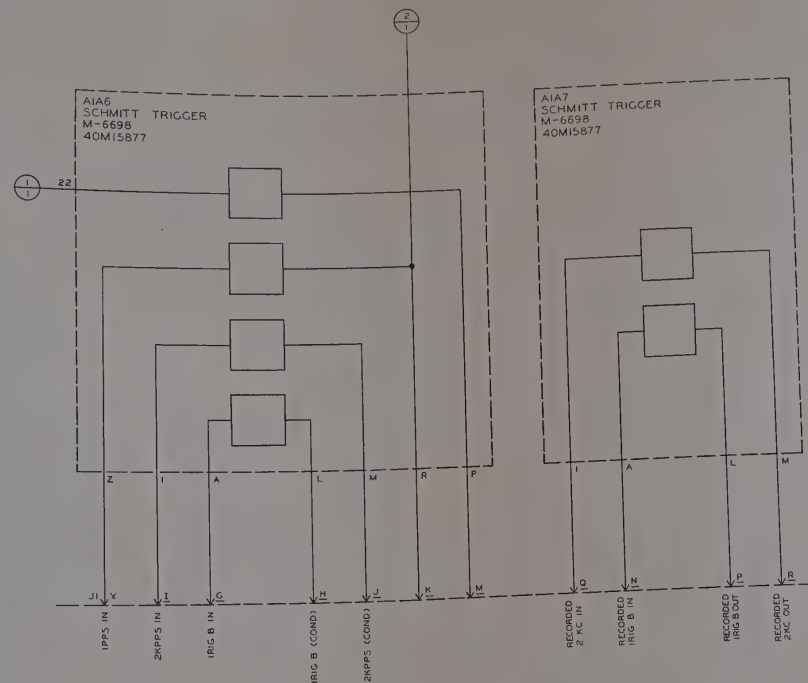
F

SEE ENGINEERING RECORDS		UNLESS OTHERWISE SPECIFIED		ORIGINAL DATE OF DRAWING: MAY 3, 63		LOGIC DIAGRAM AUXILIARY FUNCTION COUNT CLOCK TYPE I SATURN V		GEORGE C. MARSHALL SPACE FLIGHT CENTER NATIONAL AERONAUTICS AND SPACE ADMINISTRATION HUNTSVILLE, ALABAMA	
MATERIAL		DIMENSIONS ARE IN INCHES		ELECTRICITY		TOLERANCES		DRAWN BY: [Signature]	
HEAT TREATMENT		TOLERANCES ON FRACTIONS		TOLERANCES		TOLERANCES		CHECKED BY: [Signature]	
FINAL PROTECTIVE FINISH		DECIMALS		ANGLES		TOLERANCES		APPROVED BY: [Signature]	
APPLICATION		NEXT ASSY		USED ON		DIRECTOR		SCALE	
								DATE: [Date]	
								SHEET 1 OF 2	

Change Date
30 November, 1966

FORM 882-A (REVISED 1966)
 THIS DRAWING IS THE PROPERTY OF THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION. IT IS TO BE USED FOR THE PURPOSES SPECIFIED IN THE TITLE AND FOR NO OTHER PURPOSE. IT IS TO BE KEPT IN THE ORIGINAL FILE AND NOT REPRODUCED OR COPIED IN ANY MANNER WITHOUT THE WRITTEN PERMISSION OF THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION.

REVISIONS			DATE	APPROVAL
1	DATE	BY		
2	DATE	BY		
3	DATE	BY		



40M08302

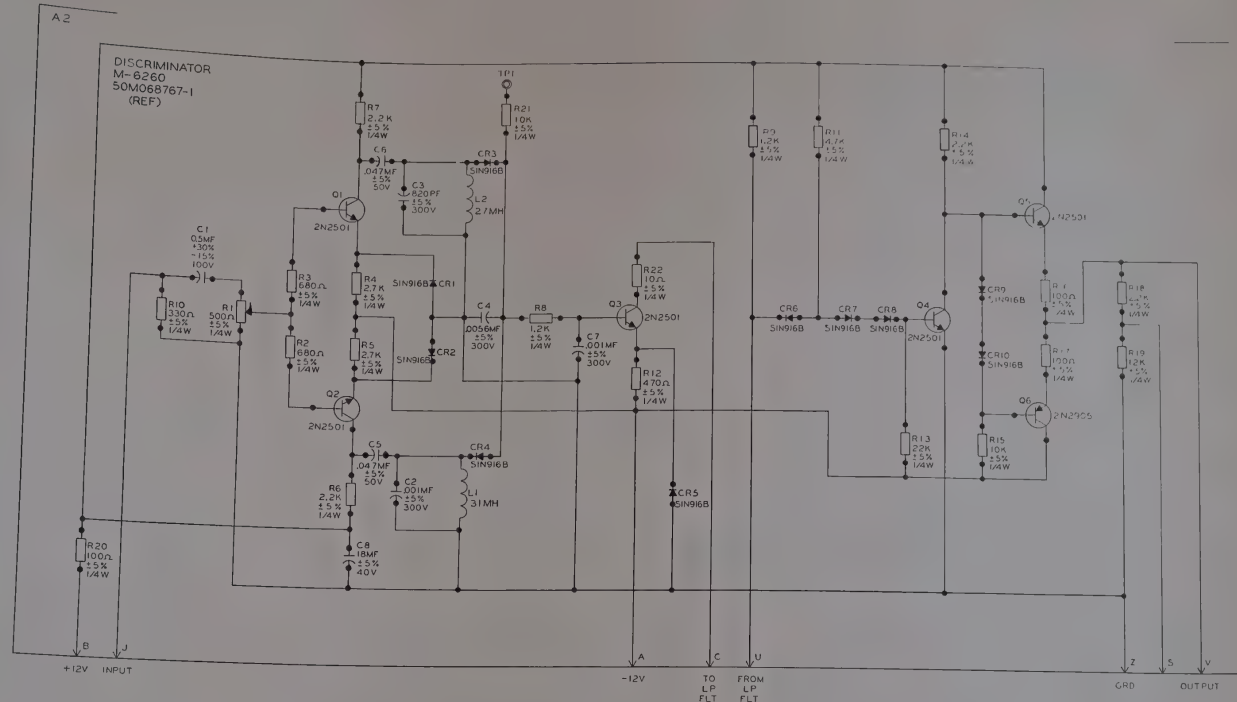
SEE ENGINEERING RECORDS		UNLESS OTHERWISE SPECIFIED		ORIGINAL DATE OF DRAWING 15/1966		LOGIC DIAGRAM AUXILIARY FUNCTION COUNT CLOCK TYPE I		GEORGE C. MARSHALL SPACE FLIGHT CENTER NATIONAL AERONAUTICS AND SPACE ADMINISTRATION HUNTSVILLE, ALABAMA	
DIMENSIONS ARE IN INCHES		TOLERANCES IN FRACTIONS DECIMALS ANGLES		DESIGNED BY [Signature]		CHECKED BY [Signature]		DATE 15/1966	
MATERIAL		FINISH		APPROVED BY [Signature]		SUBMITTED BY [Signature]		DATE 15/1966	
NEXT ASSY USED ON		FINAL PROTECTIVE FINISH		DIRECTOR		WEIGHT CHECKER		DATE	
APPLICATION						SCALE		UNIT WEIGHT	
						SHEET 2 OF 2		40M08302	

5P

Change Date
 30 November, 1966

MSFC - MAN - 205

REVISIONS
DATE
APPROVAL



40M08309

SEE ENGINEERING RECORDS		UNLESS OTHERWISE SPECIFIED		ORIGINAL DATE: APR 22 65	ADVANCED ELECTRICAL UNIT SCHEMATIC, LINE RECEIVER COUNT CLOCK TYPE I SATURN V		GEORGE C. MARSHALL SPACE FLIGHT CENTER NATIONAL AERONAUTICS AND SPACE ADMINISTRATION HUNTSVILLE, ALABAMA	
SATURN GSE		DIMENSIONS ARE IN INCHES		APPROVED: [Signature]	WEIGHT CHECKER		DATE	
NEXT ASSY USED ON		TOLERANCES ON FRACTIONS DECIMALS ANGLES		APPROVED: [Signature]	SCALE		CODE	
APPLICATION		MATERIAL		APPROVED: [Signature]	UNIT WEIGHT		SHEET 3 OF 3	
		NEXT TREATMENT		APPROVED: [Signature]				
		FINAL PROTECTIVE FINISH		APPROVED: [Signature]				

James 1/22/65 SP

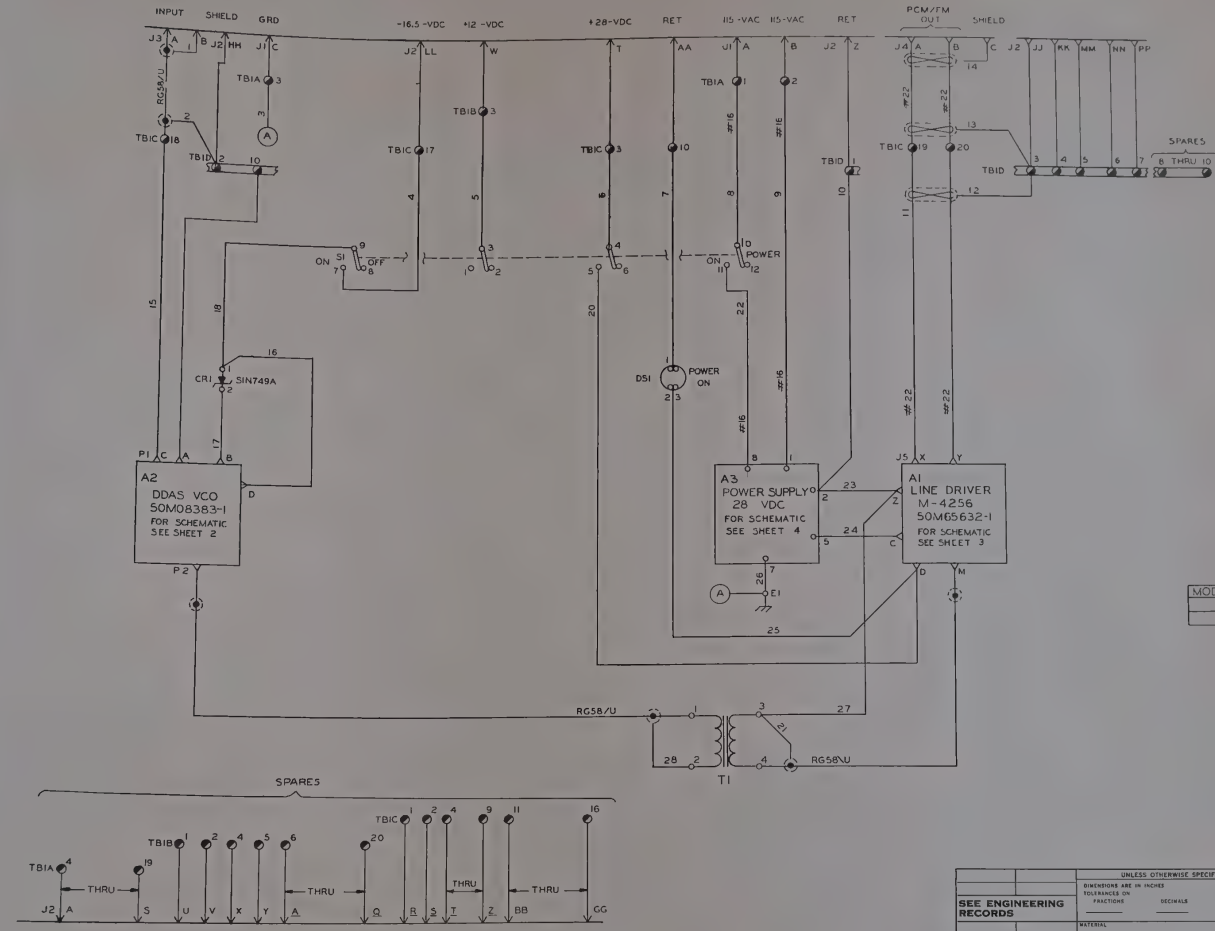
25

MSFC - MAN - 205

WIRE BUNDLE 418-8 (LAMPED 1800)

THIS DRAWING WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE MIL-STD-883C METHOD 2000, WHICH SPECIFIES THE TESTING OF ELECTRONIC DEVICES. THE DRAWING IS THE PROPERTY OF THE U.S. GOVERNMENT AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT PERMISSION IN WRITING FROM THE U.S. GOVERNMENT PRINTING OFFICE.

REVISIONS		DATE	APPROVED
1	INITIAL	17-11-65	W. B. DORR
2	REVISION	17-11-65	W. B. DORR
3	REVISION	17-11-65	W. B. DORR
4	REVISION	17-11-65	W. B. DORR
5	REVISION	17-11-65	W. B. DORR
6	REVISION	17-11-65	W. B. DORR

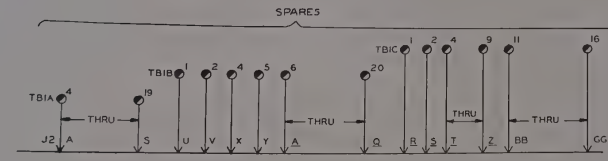


- NOTES:
1. WIRE IN ACCORDANCE WITH STANDARD DWG 40M00200.
 2. ALL LAMPS TO BE GREEN.
 3. ALL WIRE TO BE NO. 20 AWG UNLESS OTHERWISE SPECIFIED.
 4. FOR ASSEMBLY SEE DWG 40M08305.
 5. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN FOR COMPLETE DESIGNATIONS, PREFIX WITH UNIT NUMBER AND ASSEMBLY DESIGNATIONS.
 6. LAST WIRE NUMBER USED 28.

MOD KIT NO.	ECN O.	DATE INC.
09-550		
10-553		

40M08314

G

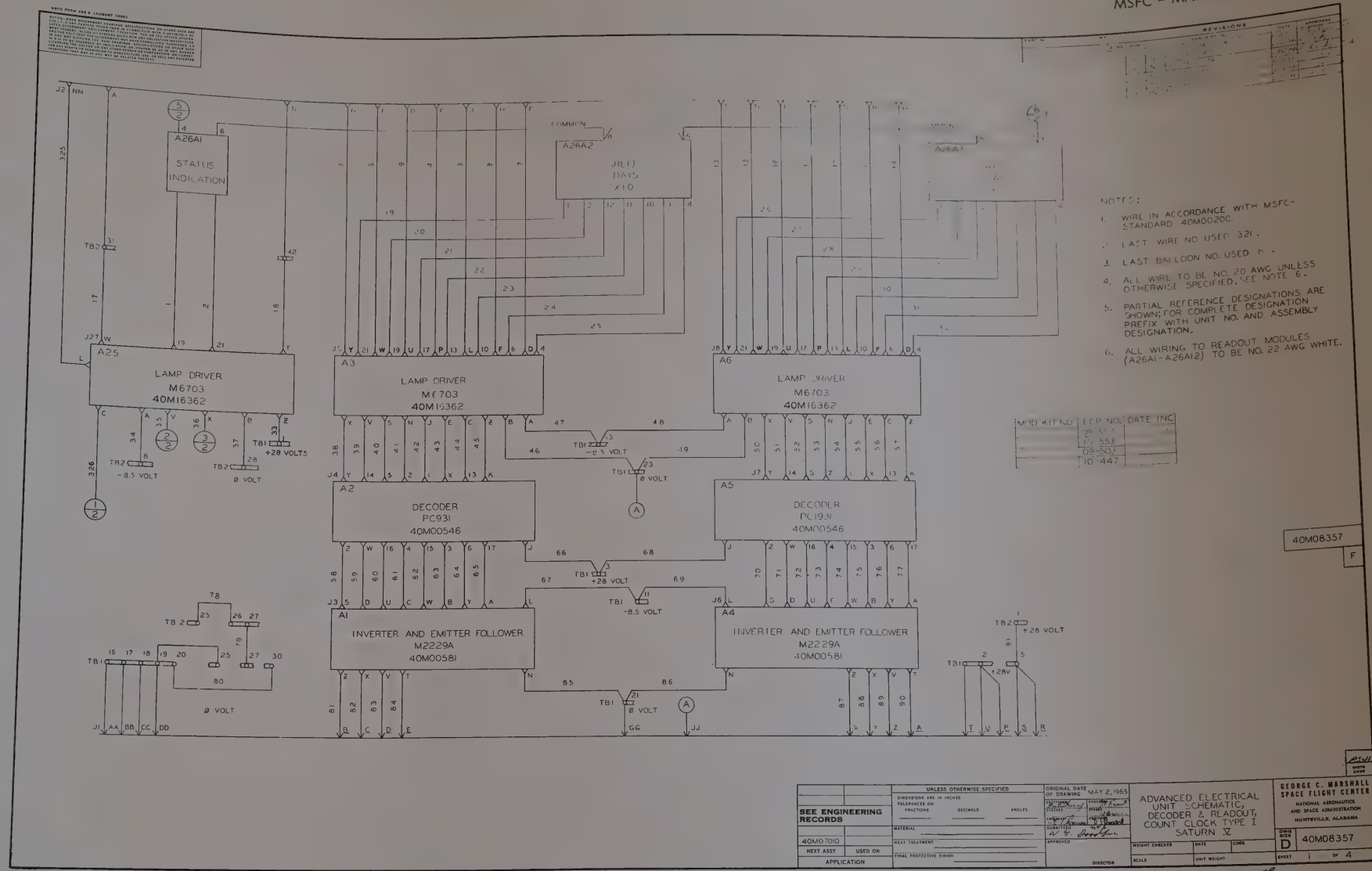


UNLESS OTHERWISE SPECIFIED		
SEE ENGINEERING RECORDS	DIMENSIONS ARE IN INCHES	ORIGINAL DATE OF DRAWING MAR 17, 1965
	FRACTIONS	DECIMALS
	ANGLES	
	MATERIAL	
	HEAT TREATMENT	
	FINAL PROTECTIVE FINISH	
	APPROVED	
	DIRECTOR	

ADVANCED ELECTRICAL UNIT SCHEMATIC		GEORGE C. MARSHALL SPACE FLIGHT CENTER	
VCO & LINE DRIVER		NATIONAL AERONAUTICS AND SPACE ADMINISTRATION	
COUNT CLOCK TYPE I		HUNTSVILLE, ALABAMA	
SATURN V			
REVISION	DATE	CODE	
1	17-11-65	W. B. DORR	
2	17-11-65	W. B. DORR	
3	17-11-65	W. B. DORR	
4	17-11-65	W. B. DORR	
5	17-11-65	W. B. DORR	
6	17-11-65	W. B. DORR	

Change Date
30 November, 1966

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